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THE
AYURVEDIC SYSTEM OF MEDICINE,

OR

AN EXPOSITION, IN ENGLISH, OF HINDU MEDICINE,

AS

*Occurring in Charaka, Susruta, Bāgbhata,
and other authoritative works, ancient
and modern, in Sanskrit,*

BY

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PREFACE.



It would be no exaggeration to say that of all nations of the earth, the Hindus first turned their attention to the study of disease and the means of its alleviation. The Vedas are undoubtedly the most ancient of written records in the world. The 'Āyurveda' or Science of Life is believed to have formed a part of the Vedas, *viz.*, those that go by the name of the 'Atharvans.' No complete text is obtainable of the Atharva Veda. Hence it is impossible to ascertain how the Science of Life was treated in it. The first great professor of Medicine coming after the age of the Atharva Veda with whom we are acquainted is Punarvasu of the race of Atri. Atri was one of the will-begotten sons of Brahman, the Grandsire of the universe. He is regarded as one of the sages through whom the Vedas were revealed. It is not known by how many degrees was Punarvasu removed from Atri. It is impossible to fix his age, even roughly. It may even be doubted whether any such person existed. He is represented as having lectured on the Science of Life unto several disciples among whom six are mentioned by name. They are Agniveṣa, Bhela, Jātukarna, Parāṣara, Hārīta, and Khārapani. These disciples became professors in time. Every one of them compiled a treatise on Medicine. That by Agniveṣa is generally allowed to have been superior in point of merit. It is believed that Agniveṣa's compilation gradually superseded the compilations

of the others. At present, fragments only exist of those compilations. *

The lectures of Punarvasu were probably collected together by his disciples. They must have been in prose. Yet Charaka, who professes to have only revised the earlier work, gives us a version which consists of both prose and verse. Charaka, indeed, calls the work as Agniveṇa's. Each lesson or chapter ends with a colophon stating—"thus ends lesson— (here occurs the number), named— (here occurs the name), in the Division called— (here the Division is named), of the *treatise of Agniveṇa*, as revised by Charaka." The probable solution is that Punarvasu's lectures were collected and arranged by Agniveṇa who, accordingly, came to be viewed as the author of the treatise which Charaka subsequently revised. Whoever was the author or, rather, compiler, the treatise consists of questions put by Agniveṇa and others, and the answers thereto of Punarvasu. Some other Rishis than the six disciples of Punarvasu are mentioned as taking part in the discussions. But Punarvasu's answers are always recorded as the final deliverances on the topics. Wherever verses are introduced, they are referred to by Charaka as those of the original work. The passages in prose seem to be abridgments of the matter occurring in the earlier treatise. That treatise could not really be in the form of lectures. It was, on the other hand, a systematic work composed, as most works of ancient India were, in the form of questions and answers. Almost all the answers are embodied in aphorisms that are often exceedingly terse. The truth is, these aphorisms constitute only heads of discourses. They are for the use of the preceptor in the lecture hall. The learning and experience

* The passage in Charaka, where these compilations are spoken of, is highly characteristic. Vide verses 29—39, Lesson I, Sutrasthāna.

of the preceptor enable him to dwell largely on them for assisting the comprehension of the pupils.

Agniveṣa's work, or rather Charaka's (as it is known to us), though valued by Hindu physicians for its therapeutical portion (चरकस्य चिकित्से), is in reality a vast and valuable repertory on a variety of subjects of the utmost importance to man. Predestinarianism and its bearing on disease and treatment, the nature of the Soul, what is meant by its birth, rebirth, and Emancipation, the means by which Emancipation may be achieved, the hundred and fifty foremost things of their respective classes, what acts a man should do and what acts he should avoid, the different kinds of mind, the qualifications of a preceptor, those of a pupil, the characteristics of the treatise to be taken up for study, medical consultations, the outlines of logic or dialectics, the duties of preceptors, the duties of pupils, the requirements of the sick-room, those of the lying-in room, and those of successful treatment, the causes of the destruction of cities and populous areas, dreams that prognosticate death, indications of the near approach of death, &c., &c., are a few only of the topics treated of in the work that goes by Charaka's name. The topics may not be closely connected with one another or even directly connected with Medical Science as it is now understood. But then it is the method of the Rishis. It can scarcely be justified upon any consideration. As to the aphoristic way of their deliverances, much may be said in its favour. The fact is, the Rishis were opposed to system-building before the collection of facts. They thought that the first step in building science consists in the collection of materials. They, therefore, set down their experiences of facts and the results of their reasoning without much attention to rigid principles of classification. Lord Bacon speaks of these

efforts of the ancients in terms of praise. "Another error," says Bacon, "is the over easy and peremptory reduction of "knowledge into arts and methods ; from which time "commonly sciences receive small or no augmentation. But "as young men, when they knit and shape perfectly, do "seldom grow to a farther stature, so knowledge while it is in "aphorisms and observations, it is in growth ; but when it "once is comprehended in exact methods, it may perchance "be farther polished and illustrated, and accommodated for "use and practice ; but it increaseth no more in bulk and "substance."

Charaka divides his work into eight divisions or books. These are 1. Sutra or Cloka, 2. Nidána, 3. Vimána, 4. Cárira, 5, Indriya, 6. Chikitsá, 7. Kalpa, and 8. Siddhi. The first comprises thirty lessons or chapters ; the second, the third, and the fourth, each comprises eight lessons ; the fifth, twelve lessons ; the sixth, thirty lessons ; the seventh and the eighth, each, twelve lessons. Thus there are, in all, a hundred and twenty lessons. Some idea may be formed of the value of of the work from the details of the thirty lessons of the first division. The first four of these thirty lessons have drugs for their topic ; the second four treat of the rules about the preservation of health ; the third four deal with what should be done and what should be avoided or abstained from ; the fourth four treat of the mode of administering remedial agents ; the fifth four treat of diseases in especial ; the sixth four treat of the application of drugs to diseases ; the seventh four deal with the ascertainment of food and drink ; the two last treat of the life-breaths and the ducts of the body, as also of the accomplishments of physicians.

After Charaka's compilation came another of great fame. It goes by the name of Suçruta. The principal

subject treated in Suçruta's great work is Surgery and Surgical diseases. Suçruta is regarded as a pupil of Divo-dása, a king of Beneras, who was believed to have been an incarnation of the celestial physician, Dhanwañtari, who had discovered the elixir that prevents death. Modern scholars may regard Suçruta's work to be as desultory in arrangement as Charaka's; but there can be no doubt that many valuable truths occur in it bearing upon Surgical diseases in general and the employment of Surgical means for the alleviation of pain. In one department, *viz.*, Midwifery, the world has advanced very little beyond the stage to which this branch of Medical science was carried in Suçruta's times.

It is curious that Suçruta also divides his work into eight books, *viz.* 1. Salya, 2. Sálakya, 3. Káyachiktsá, 4. Bhutavidyá, 5. Kaumárabhritya, 6. Agada-tantra, 7. Rasáyana-tantra, and 8. Vájikarana-tantra. The first deals with the extraction of foreign substances from the body, the opening of boils, &c., by instruments, alkaline ashes, caustics, fire, &c.; the second treats of diseases of those limbs of the body which are above the shoulders, *viz.*, ears, eyes, face, nose, &c.; the third treats of such diseases as affect the entire body, *viz.*, fever, diarrhœa, hæmorrhage, inflammations, insanity, epilepsy, leprosy, diabetes, &c.; the fourth deals with the alleviation by propitiatory rites, of diseases caused by the anger of the deities, Asuras, Gandharvas, Yakshas, Rakshas, &c., sacrifices, &c.; the fifth treats of the diseases of infants, the qualifications of nurses, the correction of the faults of milk, &c.; the sixth has for its topic the antidotes of animal poison, &c.; the seventh deals with the means of promoting longevity, intelligence, strength, &c., and the eighth treats of aphrodisiacs.

The works of Charaka and Suçruta are regarded as very ancient. It is impossible to ascertain their age. No guess even can be made. Charaka, in particular, is regarded as a Rishi. Hç is looked upon as having preceded Suçruta in point of time. The question can hardly be regarded as settled. One thing, however, is certain. When Charaka's work was compiled, Hindu physicians were already divided into two classes, *viz.*, Káya-chikitsakas or Physicians proper, and Salya-chikitsakas or Surgeons. The latter were also known by the name of 'Dhanwantariya Sampradáya', or followers of Dhanwantari. In diseases in which Surgical aid is necessary, Charaka may be seen to refer the reader to Surgeons. The comprehensive character and superior merits of both the works led succeeding writers and practitioners to regard them as of divine origin and, therefore, beyond the criticism of man. They did not venture to add to or improve the deliverances of Charaka and Suçruta on the general principles of medicine and pathology. What they did was to explain the ancient texts and dilate upon them, as also to make a clearer arrangement of the matter for convenience of study.

Among later compilers of medical treatises occur many distinguished names. Four principal compilations, however, are much valued. These are 'Ashtángahridaya-sambhitá' 'Nidána', 'Chakradatta-sangraha' and 'Bhávaprakáça'. In the first, which was compiled by Singha Gupta Sena Vágbhata, the matter is principally taken from Charaka and Suçruta. It is written in a clear style. Many things left obscure by former writers have been explained. The arrangement is certainly good. Practitioners of Hindu medicine always name Vágbhata as an authority next to Charaka and Suçruta.

After Vágbhata's work should be named 'Nidána' and 'Chakradatta-Sangraha.' The first is a concise compilation on the causes, symptoms, and treatment of disease. The matter is taken wholly from Charaka and Suçruta. It is an excellent abridgment of everything useful in the older works, and has for a long time been in the hands of Medical students in India. The authorship is attributed to Mádhavakara who is supposed to have belonged to the Vaidya caste. His father's name is said to have been Indrakara. Another opinion recently broached and which seems to be supported by evidence that cannot be easily rejected, is that the work was compiled by that Mádhava who is known by other appellations, *viz.*, Sáyana and Bháratitirtha Swámi, the great commentator of the Vedas. Whatever the evidence in support of the latter view, the question must still be regarded as open. Whoever was the real author, the compilation possesses such merits that there is no doubt it will maintain its position as long as the Hindu system of medicine will maintain its ground. The aphorisms of 'Nidána' are committed to memory. There is an excellent commentary on Nidána, the authorship of which is attributed to Vijaya Rakshita. It is said that Vijaya died after having commented on the disease called 'Açmari' or calculi. The commentary was completed by his disciple, Srikantha. There is a verse, the authorship of which is unknown, which fairly sums up the merits of the four principal treatises on Hindu Medicine. It runs thus :

निदाने माधवः श्रेष्ठः सूत्रज्ञाने च वाग्भटः ।

आरीरे सुश्रुतः श्रेष्ठश्चरकस्तु चिकित्सिते ॥

meannig that "in Nidána (or the causes of disease), Mádhava is the foremost (authority) ; in Sutra (aphoristic enunciation of

the general principles of pathology, &c.,) Vāgbhata is the foremost ; in Cārira (Anatomy), Suçruta is the foremost ; and Charaka is the foremost in Chikitsā (Treatment)" This estimate fairly accords with received opinion.

'Chakradatta-Sangraha,' as the name implies, is a compilation by Chakrapānidatta. He has written a very superior commentary on Charaka. He was probably of Bengal. There are passages in his commentary which would favour this supposition. In his explanations of the plants mentioned by Charaka, he sometimes gives the names that are current in Bengal. "*Iti Bangiyāh*" (thus the people of Bengal) occurs more frequently than "*iti Pratihyāh*" (thus they of the west.) Chakrapāni's 'Sangraha' is looked upon as a companion volume to 'Nidāna.' Diseases are arranged in it in the same order as in 'Nidāna,' and their treatment is described in detail. Vegetable drugs are mentioned. Among minerals, only mercury is named. There is no mention of opium. Hence it is supposed that both 'Nidāna' and Chakrapāni's 'Sangraha' were composed before the introduction of that drug into India by the Mussalmans.

'Bhāvaprakāṣa' is, in point of time, later than Chakrapāni's 'Sangraha.' It is a very useful and comprehensive treatise. The authorship is ascribed to Bhāva Misra. Though based upon the works of preceding authors, yet it gives much additional information about the properties of drugs. Some new drugs also are mentioned, and some new diseases. Syphilis, for example, is noticed under the name of 'Firingi-roga' or the disease introduced into India by the Firingis, a corruption of the word Franks by which appellation the Portuguese adventurers came to be known in this country. Opium is mentioned among drugs, as also almost all the minerals that are now used in practice. 'Bhāvaprakāṣa'

appears to have been compiled in the sixteenth century. It must, therefore, be more than 300 years old.

Apart from these works of world-wide fame, it should be mentioned that there is a vast body of medical literature in India about which very little is known to European scholars in general. The fact is, practitioners of medicine in this country have for ages derived the knowledge of their science and art not in public schools or colleges but from individual professors whose learning and success came to be acknowledged in the places where they practised. Knowledge in this country has never been bartered for money. The sale of knowledge has been condemned by the Hindu scriptures. Amongst European authors, Lord Bacon inveighs against the practice of making knowledge "a shop for profit, or sale." According to him, it should be "a rich storehouse for the glory of the Creator, and the relief of man's estate." He who has acquired proficiency in any branch of knowledge is bound to impart it to deserving pupils who wish to master it. Professors have not only to teach but even to feed and shelter their pupils as long as the latter stay with them. The rich and well-to-do of the land always do their best to support the learned who are engaged in teaching. For all that, learned men in India are for the most part poor. Their earnings are swallowed up in discharging the sacred duty of teaching others what they know. It is no wonder, therefore, that when a medical practitioner succeeded in acquiring a reputation for learning and skill, pupils flocked to him from different quarters for obtaining the benefit of his instructions. Even clinics were not forgotten, for the more advanced pupils used to accompany the professor in his round of visits for observing the actual phenomena of disease and practically studying both diagnosis and prognosis. The

advantage was not wholly on the side of the pupils, for the professor also was benefited considerably by the pupils he fed and taught. In India the physician has always been his own apothecary. In the collection and preparation of drugs, therefore, which often require considerable labour, the master derived valuable assistance from his students. There are medicines in the Hindu pharmacopœa which require, for their efficient preparation, to be kept on the fire for days together under constant and careful supervision. A professor in the enjoyment of a large practice could scarcely attend to the pharmaceutical portion of his duties. His pupils, therefore, were always of great help to him.

Almost every medical professor of repute having pupils to teach had to compile works, more or less abridged, for his own use in the lecture hall. Very often these works consisted of short heads of discourses, which were of great help to him in the elaboration of his lectures. It is natural that he should, while discoursing on any particular topic, give to his pupils the results of his own experience, in addition to what has been said in well-known works. An ambitious pupil would reproduce the lectures at first for his own immediate benefit. In time when he would himself set up as a practitioner and teacher, the notes of his school days would necessarily be of great value to him. When, according to this practice, all the great professors of the healing art had to compose works more or less pretentious, the fame of particular compilations would spread beyond the limits of the places where the authors practised and taught. Preserved with care, these would, in time, become even classical. It is no exaggeration to say that if works written on Hindu medicine since the days of Charaka and Suçruta could be collected, the entire volume of Indo-Sans-

krit medical literature would by no means be less than that of the medical literature of any civilised country of modern times.

There is one feature of the cultivation of Hindu medicine to which attention should be particularly drawn. India is a country of castes and guilds. Charaka says that "the Science of Life should be studied by Bráhmans, Kshatriyas, and Vaiçyas. Bráhmans should learn it for doing good to all creatures ; Kshatriyas should learn it for self-preservation ; Vaiçyas should learn it for gain (or practice as a profession). In general, all may study it for the acquisition of religious merit, wealth, and pleasure." (Sutrasthána, Lesson XXX.) In course of time, however, the study and practice of medicine, like every other occupation, came to be confined to a particular caste, *vis.*, the Vaidyas,—an honorific epithet meaning 'students of the Veda', *vis.*, of the Ayurveda. Abundant evidences occur of the Vaidyas having been always a literate caste. Science has recognised the principle of heredity as one of the most powerful factors in the communication of both intelligence and skill in every craft. The facilities, again, of instruction, where the teacher is a father, an uncle, or an elder brother, and the pupil a son, a nephew, an younger brother, or any other loved relative, are simply abundant. The pupil resides with the instructor. He receives a training that is both theoretical and practical. The absence of hospitals and infirmaries is, as already said, no bar to clinical study, for the student accompanies the teacher to the bedside of the latter's patients. Hindu pharmacopœa depends very largely on herbs and plants. In the absence of a knowledge of scientific botany, the identification of these is always attended with difficulty. In the case of pupils belonging to the family of the teacher and residing with him in the same premi-

ses, the facilities are very ample of acquiring a thorough practical knowledge of herbs and plants. It is true that students unconnected in blood with the preceptor also take up their residence with him and are for all purposes regarded as members of his family. Yet the preceptor, whatever the measure of his impartiality, naturally feels a greater affection for the children of his own family than for students that are strangers to him in blood. The natural desire, again, of preserving the superiority of his own family would often induce even an honest preceptor to take greater care of pupils connected with him by birth and blood than of those that are not so connected. Speaking of Bengal in particular, it is this circumstance that accounts for the existence, in some districts, of a few medical families of great reputation. These families have for generations practised the healing art with success. The compiler of this brief work on Hindu Medicine has the honour to belong to such a family. He is of the Vaidya caste. Almost all his ancestors were practitioners whose fame had spread all over the country. Many of them were holders of the highest titles of honour known to the profession.

I have briefly adverted to the facilities that have always existed for the study of Hindu Medicine. The absence of colleges and hospitals has never been felt in consequence of the circumstances I have mentioned. The difficulties, however, of the study are many. These were, down to a very recent period, principally founded upon the scarcity of medical books. Speaking, in the forties, of the absence of medical practitioners of note and the lamentable state of depression to which the practice of Hindu Medicine had been reduced by a variety of causes operating together, Dr. T. A. Wise, of the Bengal Medical Service, remarked, in

the introduction to his valuable "Commentary on Hindu Medicine," as follows :—"A very few practitioners may still be found in the neighbourhood of cities, in the service of rich individuals in whose families the ancient treatises of their forefathers are studied, and transmitted from generation to generation. I have had the happiness of knowing such a family of hereditary physicians, rich, independent, and much respected. Among such, the ancient Medical Works are so highly valued that the influence of station, rank, and money, will often be ineffectually exerted in procuring these manuscripts. In some cases, it is even difficult to obtain permission to copy such works, at the owner's house ; from a belief that all the good to be derived from their possession, which God had bestowed on the individual and his family, would vanish on the work being sold, or even the precepts communicated to unauthorised hands." This is, no doubt, a coloured picture of the state of things that existed, and contains some misconceptions from which few Englishmen dealing with matters of this kind can possibly be free. Yet the allegations about the difficulty of procuring books are, in the main, not incorrect. The fact is, printing was unknown to the Hindus. It is one of those blessings which has followed the British occupation of the country. In former times, a student desirous of studying any branch of knowledge had to copy out his books either himself or employ a copyist for the purpose. This meant an appalling measure of drudgery, a frightful loss of time, or a considerable measure of expense. Even after the introduction of printing into India, considerable reluctance was manifested by the people towards printing their sacred literature. The Bráhmans, in particular, set their faces against the multiplication of copies of almost every work of a sacred

or *quasi*-sacred character. That reluctance arose not from a belief, as Dr. Wise understood, that the good to be derived from their possession would vanish on the work being sold, but from the conviction that a multiplication of copies would expose the precepts of science to every eye to the detriment of science itself. Rightly or wrongly, the professors of every branch of learning held that the truths they taught were not suited to every understanding. A person of ordinary understanding, believing in the existence of a personal God whom he worships reverently with incense and flowers, is not fit to receive the highly philosophical ideas of Godhead which the Vedānta inculcates. A Vedāntic treatise will certainly confound the dearly cherished notions of such an individual and lead him either to doubt or even abandon his old faith without being able to at all comprehend the higher truths of religion with which he will be brought face to face while perusing such a work. Or, in all probability, he will discard the Vedānta itself as a false and highly atheistic philosophy fraught with every kind of mischief. In Charaka's great work the qualifications are elaborately laid down of a person that may be admitted as a student of medical science. Knowledge has its advantages as well as disadvantages. The possessors of knowledge in ancient India wished to guard against the disadvantages of the communication of knowledge. By acquiring knowledge they incurred the obligation of imparting it to others free of all charges. While retaining a vivid consciousness of that obligation, they closely examined the characters of those who presented themselves before them in the guise of pupils. Manu has said,—

विद्ययेव स न कामं मर्त्यं ब्रह्मवादिना ।

आपद्यति चोराणां क्लेशान्मरिचे वपे ॥

"An utterer of *Brahma* (meaning, a professor learned in the Vedas) should rather die with his knowledge than sow it, in even the direst distress, on a soil that is barren." Legendary history abounds with instances of professors refusing to impart their science to students whom they regarded unfit. The great master of the science of arms, *viz.*, Ráma of Bhṛigu's race, refused to communicate the knowledge of the all-destructive and irresistible *Brahma* weapon to students other than Bráhmans. His great pupil, Drona, refused to teach students other than Kshatriyas of pure lineage. It was under the influence of such beliefs and examples that the professors of medical science refused to part with their treatises to persons other than those whom they regarded as deserving. To part with their treatises to foreigners, again, was held sinful. Unable to understand their feelings, Dr. Wise regarded the unwillingness he met with among medical professors to even allow copies to be taken of the works in their possession to a superstitious conviction that their science would cease to be useful if made public. People who taught students by dozens, meeting from even their own slender resources the expenses of their board and shelter, could not be open to a charge of the kind preferred against them by Dr. Wise.

Apart from the difficulty of commanding treatises and books for study, another difficulty that staggers the student or, rather, the young practitioner, is the infinite labour that is required in procuring the ingredients of medicines as also the costliness of those ingredients. There are medicines in the Hindu pharmacopœa which are the result of collection of materials occupying several months. There are medicines, again, which require such costly minerals as gold and silver in considerable quantities. I have already said that Hindu

physicians are their own apothecaries. They have themselves to prepare the drugs they prescribe for their patients. Without a respectable stock of medicines of all kinds, no physician can be much useful within the field of his practice. Calcutta abounds with practitioners of Hindu medicine. Without counting the quacks,—and their number is legion,—who have set themselves up as healers of disease without having read a page of the ancient or the modern treatises on Hindu Medicine, the number of even duly qualified practitioners is not inconsiderable. How many of them, however, have dispensaries containing even the principal medicines of our pharmacopœa? The fact is, the majority of even qualified practitioners is poor. If they succeed in getting a wealthy patient, it is then only that from the sum paid in advance they are enabled to prepare a particular medicine. Formerly wealthy men used to employ local practitioners to prepare, at their cost, many valuable medicines which they gave away in charity to poor patients agreeably to the prescriptions of the attending physicians. The course of national charity having been diverted under the influence of Western ideas, that practice has been discontinued. Practitioners have now to depend upon their own means for preparation of the medicines which they have to prescribe. Young physicians, unless they succeed in obtaining well-to-do patients, are quite unable to meet the costs of such medicines. Here, again, a practitioner who belongs to the family of a physician of repute has a distinct advantage over one who is otherwise. He can command, for the purposes of his practice, all the medicines of the Hindu pharmacopœa that are in the dispensary of his family. In consequence also of this facility which he enjoys, his practice extends rapidly. His earnings increase day by day, and he succeeds very

soon in establishing a proper and well-furnished dispensary of his own if he chooses to set himself up in a new place.

While introducing his work entitled "Commentary on the Hindu System of Medicine," in 1845, Dr. T. A. Wise observed,—“an accomplished scholar had, indeed, given an interesting account of Hindu opinions regarding certain diseases ;* a persevering traveller had afforded a sketch of certain opinions contained in the medical Shástras, as translated into the Thibetan language ;† an antiquarian and a distinguished physician had given some of their peculiar opinions, as found in the medical works of the south of India ;‡ and an able lecturer had combined all this information with important additions of his own ;\$ but a comprehensive view of their system of medicine which it is the intention of the present work to supply, is still wanting to complete our information on the subject.” Without at all under-rating the value of the labours of these scholars and physicians, and without at all depreciating the merits of Dr. Wise's publication, it may be safely said that no book has been written upon the lines followed by me in the present work. Dr. Udaya Chand Dutt's "Materia Medica of the Hindus" did much to supplement the labours of Dr. Wise, but what was needed for a fuller comprehension of Hindu Medicine as practised by its professors is a more systematic work than either Dr. Wise's or Dr. Dutt's. I have, in the following pages, endeavoured to achieve a desideratum that has been long felt. The present work is the first of its kind. For the first time a

* Professor Wilson, Tran. Med. and Phy. Society, Calcutta, vol. I.

† Mr. Soma de Koro's, Journal Asiatic Society, Calcutta, No. 37, January, 1835.

‡ Dr. Heyne's Tracts on India, and Ainslie's *Materia Medica Indica*, London.

\$ Dr. Royle on the Antiquity of Hindu Medicine, 1838.

complete exposition is offered of what is contained in Hindu medical treatises about disease and its cure. There is nothing in the publications of Dr. Wise and Dr. Dutt that the reader will not find in the following pages. At the same time, there is much in this book which is not included in those works.

As regards the following compilation, it should be stated that it is in effect a translation of a work written by me in Bengali some years ago. That work has passed through several editions. This fact may be viewed as some evidence of its success. My endeavour has been to reproduce, in each chapter, the contents, in a condensed form, of larger works on Hindu Medicine. I have, in a few places, inserted the results of my own experience. The descriptions of the diseases have generally been taken from Charaka and many later works. In publishing the present work, which is in English, my object is to place before the English-speaking world, and particularly before physicians and surgeons practising the western method of Medicine, the knowledge which the Rishis had of disease and its cure. I have named nearly all the important scriptural medicines upon which native physicians rely. Their ingredients, and the methods of their preparation have been explained in the second volume of this work. The labour I have bestowed on this brief exposition of Hindu Medicine as founded on ancient works and as practised by native physicians will be regarded as amply compensated if it succeeds in attracting the attention of those for whom it is intended.

I should here express my obligations to Pandit Kisori Mohan Ganguli, the learned English translator of 'Mahābhārata' and 'Charaka.' The value of the assistance received from him is known only to me. This book, perhaps, would not have been written but for the help derived from him.

18-1, Lower Chitpore Road, }
Calcutta, 15th September, 1901. } *Kabiraj Nagendra Nath. Sen.*

INTRODUCTION.

SECTION I.

THEORY OF HEALTH AND DISEASE. OR, THE GENERAL PRINCIPLES OF HINDU MEDICINE.

The theory of Health and Disease, as expounded in Hindu medical treatises, is easy to understand. A living creature is composed of soul, mind, and body. In the language of Funarvasu, "this trinity resteth on union like three sticks standing with one another's support." The compound is called *Purusha* or Being. It is this compound of soul, mind, and body, that is the subject-matter of the Science of Life. The soul is regarded as immutable. It is incapable of being affected by anything. It is eternal. It is regarded as the witness, for it views all things without being itself affected by anything. The body, like all other material objects, has for its constituent elements the five primordial essences, *vis.*, earth, water, fire, air, and ether. These exist in the shape of juices, blood, flesh, bones, adeps, marrow, semen, and '*ojas*.' United with the senses or the instruments by which the mind acts, the compound is called animate. Without them, it is inanimate.

Body and mind are the subjects to which Health and Disease inhere. When the constituent ingredients of the body are in their normal condition, the body is said to be in

Health. When the functions of the mind are in their normal condition, the mind is said to be in Health. When the normal condition of both the body and the mind is disturbed, the result is Disease.

"Of all diseases, physical and mental", (to use the language of Punarvasu), "the causes, in brief, are three, *viz.*, adverse correlation, absence of correlation, and excessive correlation, of Time, Mind, and the objects of the senses. *" Time is of two kinds, *viz.*, that which we divide into seasons, months, fortnights, weeks, days, &c., and that which is concerned with the age of man and which we divide into infancy, youth, manhood, and decrepitude. Time, mind, and the objects of the senses have relations with each other and one another. When the harmony of these relations is disturbed, the result is disease. A person in a certain season or a certain age may do that with impunity which in another season or another age may be productive of harm. In this case there occurs an adverse correlation or excessive correlation between time and the objects of sense. The eye exists for seeing, the ear for hearing. If one, however, keeps one's eyes directed to gaudy or blazing colours for a long time, or hears loud and disagreeable noises for hours together, the result is injury to those organs of sense. There happens, in these cases, an excess of correlation between the eye or the ear and its object. If, again, one keeps one's eyes continually shut, the result is a weakening of vision or an incapacity to bear the light. In

* As this is a very important aphorism and is regarded as an exhaustive enumeration of the causes of disease, I give the original. It is—

आवृत्तौ निवारणौ बीबी निषा न नाति च ।

व्यावृत्तौ व्याधीनां चित्तो विवृण्वतः ॥

such cases there is what we say an absence of correlation between the eye and its object. The mind, by dwelling too long and too closely on a particular object, may become deranged. This would be called an instance of excess of correlation between the mind and the object. Thus, in respect of time, of mind, and of the objects of the senses, excess of correlation, or the entire absence of correlation, or adverse correlation, are causes of diseases both mental and bodily. Fault of judgment or the understanding is the sole cause of these abnormal correlations. Soundness of the understanding keeps them at a distance.

The human body is supposed by Hindu physicians to have three marked states due to three different kinds of forces. These are called Wind, Bile, and Phlegm. These, when disturbed, cause diseases. They are called 'doshas' or faults, because they are capable of vitiation and, when vitiated, they vitiate the other ingredients of the body. The attributes ascribed to Wind are dryness, lightness, clearness, coolness, motion, and form lessness. The indications of its abnormal functions, as it exists in the different limbs of the body, are these : falling out, displacement, extension or enlargement, and bursting of limbs, cheerlessness, joy, thirst, tremours, pain in the whole body, twitching, piercing pains (as if caused by needles), inflammations, painful sensation as if caused by the limb (that is its seat) being tightly bound with cords, fractures, roughness of the skin, hardness of the limbs, heaviness of the limbs, absence of activity, perforations in the limbs, redness of complexion, astringent taste in the mouth, tastelessness in the mouth, severe pains of a local character, swellings, sleep, contractions (of skin, muscles, nerves, &c.,) and numbness or paralysis of limbs. When a disease presents

these or any of these indications, the physician assigns it to the action of the disturbed Wind.

Diseases of the Wind are treated with the aid of medicines that are sweet, or sour, or saline, or those that are cooling and warm. Settling also the measure and the time, the other expedients employed are the administration of Sweda, (appliances for producing perspiration), of oils, enemata both dry and oily, cerebral purgatives, proper diet ; rubbing medicated oils, application of unguents, baths including the pouring and sprinkling of medicated waters upon the body, and other expedients that are known to alleviate the Wind. Among these, the use of enemata of both kinds, *viz.*, dry and oily, is regarded by physicians as the foremost of all expedients in treating of diseases of the Wind. Enemata of both kinds, entering or affecting, at the very outset, that part of the stomach where digestion goes on, tears up the very roots of that Wind which generates disorders. The Wind being subjugated there, the diverse diseases generated in diverse parts of the body by the disordered Wind, become allayed, even as when the root of a large tree is cut off, the trunk and branches and twigs, and flowers, and fruits, and leaves, necessarily wither and meet with destruction.

The attributes of the Bile by itself are heat, keenness, lightness, and slight ciliness. In colour it is not white. Its scent is like that of raw meat. Its taste is two fold, *viz.*, bitter and sour. In consequence of the true or unmodified nature of Bile by itself being so, the indications of its functions, when it is in a disturbed or excited condition, are these : penetrating into those parts of the body that constitute its seats, the effects it produces are burning, warmth, suppuration, sweat, impurities, gangrenous ulcerations, secretions, and redness of complexion.

When these or any of these indications are manifested, the physician ascribes the disease to the excitement or aggravation of the Bile.

Diseases caused by disorders of the Bile are treated by the administration of such remedies as are sweet, or bitter, or astringent in taste ; or, as are cooling. In treating them the aid should be taken of oils, purgatives, unguents, fomentations, medicated oils for rubbing, baths, and similar other means.

Physicians regard purgatives as the foremost of all agents in the treatment of diseases of the Bile. Purgatives, entering at first that part of the stomach which holds the undigested food, destroy the root of that Bile which causes the disorders. The Bile being subjugated there, the diseases brought about by its excitement or aggravation in diverse parts of the body, become allayed. As when a fire within a chamber is put out, the fire-chamber itself becomes cool, even so the excited Bile is allayed when its origin is removed.

The attributes or indications of Phlegm by itself are whiteness, coldness, heaviness, oiliness, sweetness, firmness, sliminess, and softness like that of good earth. In consequence of its being so, the indications of its excited state are as follows : entering those parts of the body that are its seats, it produces whiteness of complexion, coldness, itching, dulness, heaviness, oiliness, loss of sensation or paralysis, sleep, impure scretions, excrescences, a sensation of tightness as if bound with cords, sense of sweetness in the mouth, and procrastination in respect of work. When diseases manifest these or any of these symptoms, the physician attributes them to excited or aggravated Phlegm.

Diseases caused by disorders of the Phlegm should be treated with such remedies as are pungent, bitter, astringent, keen, warm, and dry.

In treating them the aid should be taken of Swedana (or methods for producing perspiration), of emetics, of errhines, of physical exercise, and of similar other operations that are destructive of phlegm. Among all these, physicians regard the application of purgatives, after settling the measure or dose and the times thereof, as the foremost in point of efficacy. Purgatives, entering at first the stomach which contains undigested food, destroy the root of that phlegm which causes the disease. The phlegm being subjugated there, the diseases brought about by its excitement in diverse parts of the body, become allayed. "As paddy and barley and other crops", says Punarvasu, "are dried up when the water collected in the field runs away upon the ridges enclosing it being broken, even so diseases caused by phlegm are destroyed upon the root of the phlegm being thus destroyed."

It is scarcely necessary to state that Wind, Bile, and Phlegm are the three things that should be carefully understood before the Hindu system of Medicine can be understood. To adopt the language of a writer well acquainted with the subject: "every science must have its technical terms. In the selection of these, however, care should be taken to avoid words which in common use have other meanings. Unfortunately, the framers of the Hindu system of Medicine did not take this care. The three words they chose had and have other significations. Hence these have been very much misunderstood. Wind is not the air or atmosphere we breathe; Bile is not the secretion of the liver that helps digestion; and Phlegm does not mean the secretions that persons afflicted with catarrh throw out. They are, on the other hand, technical terms that imply certain states of the physical constitution. Certain operations in healthy and

unhealthy bodies are attributed to the agency of certain forces in their normal and abnormal states. The belief in the existence of those forces is no more unscientific than the belief in gravitation as a force residing in solid substances. Gravitation, apart from the fact of the falling down of solid bodies, is no longer supposed to mean anything. Yet there is a convenience in speaking of gravitation as a force. After the same manner, certain groups of physical phenomena are ascribed to the existence and action of certain forces called Wind, Bile, and Phlegm. As forces, one may not know anything more of them than the phenomena they display. Yet in conceiving of their existence there can be no particular inconvenience. To say that the Hindu system of Medicine is unscientific in consequence of its reliance on this trinity of causes with respect to both health and disease, can proceed only from a misapprehension of the true import of the terms employed."

The respective divisions of the body that constitute the seats of the three faults, (*viz.*, wind, bile, and phlegm), are these :

The hypogastric or pubic region, the place where the fæces collect, the regions about the loins, the thighs, the feet, and the bones, are the seats of the wind. That portion of the stomach where digestion goes on is regarded as of all places the particular seat of the wind.

Sweat, the thorax, saliva, blood, and that portion of the stomach where undigested food remains, are the seats of the bile. The last is especially the seat of bile.

The thorax, the head, the throat, all the joints, that portion of the stomach which holds the undigested food, and the fat are the seats of phlegm. Amongst these all, the thorax is especially the seat of phlegm.

It should be noted that wind, bile, and phlegm wander over every part of the body. Excited, or unexcited, they produce evil or good consequences in every part of the body. In their normal or unexcited state they produce beneficial results, such as growth, strength, good complexion, clearness of the senses, &c. In fact, they cause all the functions of the body to go on. When not in their normal condition they produce evil results called disease.

Diseases are classified in various ways. I have already adverted to the twofold classification, *viz.*, Mental and Bodily. Those appertaining to the Mind, such as Insanity and the rest, are Mental ; while those that appertain to the Body, such as fever and the rest, are Bodily.

Another twofold classification is Accidental and Constitutional. The immediate causes of Accidental diseases are wounds inflicted by nails, or teeth, or falls, incantations, curses of men possessed of ascetic puissance, assaults of evil spirits, acts of violence done with weapons, &c., binding, pressure, cords, burns, lightning-strokes, and assaults of other physical agents. Of all Constitutional diseases the causes are disorders of wind, bile, and phlegm. Accidental diseases arise at first from wounds, &c., which afterwards excite the wind, the bile, and the phlegm. Constitutional diseases, on the other hand, arise at once from disorders of wind, bile, and phlegm. Excitement of wind, bile, and phlegm, therefore, lies at the root of both Accidental and Constitutional diseases. There is this difference : as regards the former, such excitement is the result of injuries or acts of violence ; while as regards the latter, it is due to other causes.

Diseases, again, are sometimes classed under four heads, *viz.*, 1. Accidental, 2. those born of wind, 3. those born of

bile, and 4. those born of phlegm. Though divided into four classes, their character as disease is of one kind, for the common element of pain is present in all of them.

From the stand point of curability, diseases are classed as 1. Easily curable, 2. those that are curable with difficulty; and 3. those that are incurable. Incurable diseases, again, are classed under two heads, *viz.*, those that are capable of being suppressed, and those that have no treatment.

Some happy observations occur in Charaka on the subject of treatment which deserve to be quoted. "The disease should first be carefully ascertained. After this, the medicine to be applied should be carefully selected. Subsequent to this, the physician should, with full knowledge of consequences, commence the treatment. That physician who, without carefully ascertaining the disease, commences its treatment, seldom meets with success even if he be well conversant with medicines and the methods of their application. The physician who is well conversant with the features of disease, who has a thorough acquaintance with all medicines, and who has knowledge of the considerations dependant upon time and place, achieves success."

The course that is adopted for restoring the lost harmony of the ingredients of the body is called Treatment. Treatment is regarded as dependent on four things. These are 1. Physician, 2. Drugs, 3. Nurse, 4. Patient. The physician should have a thorough knowledge of the scriptures and treatises bearing on his science. He should have experience of actual results, besides cleverness or resourcefulness, and purity of both body and mind. Abundance of virtue, adaptability to the disease under treatment, capacity of being used in diverse ways, and undeterioration, are the four attributes of a drug upon which the physician can rely.

Knowledge of the manner in which drugs should be prepared or compounded for administration, cleverness, devotedness to the patient, and purity of both body and mind, are the four attributes of a good Nurse. Memory, obedience to the directions given by the physician, fearlessness, and communicativeness with respect to all that is experienced internally and all that is done by him during the intervals of the physician's visits, should be the qualifications of the patient. Success of treatment depends upon these. In this aggregate of four, the physician is, of course, the chief cause of success, since, as Charaka says, "he is the ascertainer of the character of the disease, the director of all that the patient and the nurse should do, and the minister of the remedies that bring about the cure. As in the act of cooking, a vessel, fuel, and fire are means in the hands of the cook ; as a field, an army, and weapons are means in the warrior's hands for achieving a victory in battle ; even so the patient, the nurse, and drugs are objects that are regarded as the physician's means in the matter of achieving a cure. In the act of treatment, the physician is regarded as the chief cause. Like clay, stick, wheel, thread, &c., in the absence of the potter, failing to produce anything by their combination, the three others, *viz.*, drugs, nurse, and patient, cannot work out a cure in the absence of the physician. In the matter of the most difficult diseases disappearing like the vapoury forms in the welkin, and of others capable of ready cure but aggravating within the shortest time, the sole cause is a competent or an incompetent physician, the other three of the tale of four being present in both cases. Even death (without treatment) is preferable to treatment made by an ignorant and incompetent person. As ignorant physician proceeds in the treatment of disease like a boat tossed by

the wind or like a blind man who, having no knowledge of the ground over which he walks, gropes fearfully along, always stretching out his arms. That physician who possesses these six qualifications, *viz.*, knowledge (of the scriptures bearing on the science of life), faculty of reasoning or drawing inferences from established propositions, conversance with other branches of knowledge, memory, an aptitude for treating disease, and repeated experience of treatment, can accomplish everything in his line. The scriptures are as light for discovering objects. His inner understanding is like the eye. The physician, by undertaking to treat disease after having properly equipt himself with these two, incurs no blame."

SECTION II.

INGREDIENTS AND CLASSIFICATION OF HINDU MEDICINES.

Hindu medicines either consist of or are manufactured from three kinds of substances, *viz.*, mineral, vegetable, and animal. Amongst minerals may be mentioned, in brief, diamond, emerald, and other gems ; gold, silver, iron, lead, and other metals ; realgar, orpiment, sulphur, mercury, &c.; and various sorts of earths, including salts. Vegetables are classed under four heads, *viz.*, 'Vanaspati' 'Virudh' 'Vánaspatya,' and 'Oshadhi.' Those vegetables which produce fruits without putting forth flowers are called 'Vanaspati.' Those which produce both fruits and flowers, are called 'Vánaspatya.' Those which creep or, as they grow, are supported by other plants, are called 'Virudh.' They are otherwise known by the names of 'Pratánavati' and 'Valli.' Those which perish after the ripening of their fruits are called 'Oshadhi.' All deciduous herbs and plants fall within this class. Animals fall within four classes, *viz.*, 'Jaráyuja,' 'Andaja,' 'Swedaja,' and 'Udbhijja.' By 'Jaráyuja' is meant all viviparous animals or mammals. 'Andaja' or egg-born include all oviparous ones. By 'Swedaja' or filth-born are meant all worms and insects that are born from filth or animal excretions, as also diverse kinds of rotten substances. By 'Udbhijja' or tree-born are meant those kinds of insects which are supposed to be born of vegetable substances, or which take their birth underground and spring upwards after birth.

The above is Charaka's classification. Suçruta divides medicines into two principal classes, *viz.*, 'Pārthiva' or relating to the Earth, in the sense of being material objects, and 'Kálakrita', *i.e.*, produced by 'Kála' or time. The latter includes such natural agents as air, sunshine, shade, moon-light, darkness, cold, heat, day, night, lunations, months, seasons, and the like. These affect the 'dhátus' or ingredients of the body. When a derangement occurs among the 'dhátus', the result is disease. The natural agents mentioned, by restoring harmony to the deranged 'dhátus,' often bring about a cure, without the aid of medicines falling under the first head.

The minerals which enter into the composition of medicines are classed under five heads. These are 1. 'Rasa' or mercury, 2. 'Uparasa' or metallic ores and various kinds of earth, 3. 'Dhātu' or metals, 4 'Lavana' or salts, and 5. 'Ratna' or precious stones.

As 'Rasa' does not include any other mineral than mercury, the latter forms a class by itself.

The 'Uparasas' are sulphur, talc or mica, two varieties of Iron pyrites called 'Suvarnamákshika' and 'Táramákshika,' loadstone or magnet, arsenic, white arsenic, orpiment, realgar, sulphate of copper, sulphate of Iron, cinnabar, minium or red lead, sulphuret of lead, calamine, 'Silájatu' (a bituminous substance containing iron, said to be exuded by rocks), alum, borax, chalk, calcined shells, red ochre (a variety of red mountain earth, called 'Gairika' in Sanskrit), 'Kankushta' (a sort of mountain earth), 'Sauráshtri' (a sort of fragrant earth said to be brought from the country about Surat), 'Sarkara' (sand), lime, &c.

The 'dhátus' mentioned in Hindu pharmacopœa are gold, silver, copper, tin, zinc, lead, iron, galena, bell-metal, brass, &c.

The 'Lavanās' or salts, as mentioned by Suçruta, are of eight varieties. These are 1. 'Saindhava,' 2. 'Sámudra' 3. 'Vit,' 4. 'Sauvarchala,' 5. 'Romaka,' 6. 'Audbhida,' 7. 'Gutiká,' and 8. 'Pánggūja' otherwise called 'Ushasuta.' The first five generally go by the name of 'Panchalavana' and often occur in combinations. The three remaining varieties are used very rarely. 'Saindhava' means born in Sindh or the country about the Indus. The name is applied to rock salt, three varieties of which are known, *viz.*, white, red, and crystalline. The last, when pure and white, is used for medicinal purposes. For alimentary purposes also it is preferred by the orthodox classes to all other varieties of salt. It is supposed to be digestive, appetizing, and agreeable, and is prescribed in various abdominal diseases such as dyspepsia. 'Sámudra' means born of the sea. The term is applied to sun-dried sea-salt manufactured in almost every part of the eastern sea-coast of India. It is a little bitter in taste and has laxative properties. Orthodox Hindus, who have a prejudice against ship-borne salt, use it for alimentary purposes like rock salt. Indeed, 'Sámudra' salt and rock salt have many properties in common. 'Vit' salt, otherwise called 'Kálánimak' or black salt occurs in dark reddish granules of a shining hue resembling powdered lac. It has a mild, saline, and nauseous taste. Its smell is disagreeable. It is prescribed in enlarged spleen, dyspepsia, indigestion, and bowel complaints in general. 'Sauvarchala,' otherwise called 'Sanchál', is used as a substitute for 'Vit.' In some parts of India it is called by the name of 'Kálánimak' or black salt. It is aromatic, agreeable to the taste, and digestive. It is a dark-coloured salt, obtained by dissolving common salt in a solution of 'Sájimáti' (crude soda). It contains chloride of sodium, sulphate of soda, caustic soda,

and some sulphate of sodium. 'Sauvarchala' is not obtainable in the ordinary drug shops of Calcutta. Sometimes a chrystalline form of rock-salt is used in Bengal as a substitute for 'Sauvarchala.' 'Romaka' is the best and purest of evaporated salts. It is otherwise called 'Sákambari' and is obtained from the Sambar lake in Rajputana. The salt water of the lake is allowed to evaporate. The residue or deposit in the vessel assumes the form of clear rhomboidal crystals. It has a pungent taste, and laxative and diuretic virtues besides the ordinary properties of salt. The name 'Romaka' is supposed to be derived from a river called 'Rumá.' 'Audbhida' is produced, as the name implies, from the earth. It is an efflorescence on what are called *reh* lands. It contains sulphate of soda with a little chloride of sodium, and is bitter, alkaline, pungent, and disagreeable in taste. It occurs in abundance in some parts of the Punjab. The soil which produces this salt is utterly unfit for cultivation. 'Gutiká,' mentioned by Suçruta and some later writers, is a kind of boiled salt. It is so called in consequence of its assuming a hard nodular shape from boiling. Suçruta describes it as stomachic, laxative, and digestive. 'Pángsuja' literally implies obtained from (saline, dust. Common salt, manufactured from saline earth, is so named. To these eight varieties of salt mentioned by Suçruta, should be added 'Yavakshará' or impure carbonate of potash, 'Sarjjikshára' or impure carbonate of soda, 'Sarvakshára' or mixed ashes of several plants, 'Narasára' or chloride of amonia, 'Soráka' or nitrate of potash, and 'Tankana' or borax. There are many medicines which are composed of these salts. They are administered in dyspepsia, indigestion, enlarged spleen, and abdominal tumours.

The varieties of 'Ratna', or precious stones, that enter

into the composition of remedial agents are 1. 'Hiraka' or diamond, 2. 'Garutmat' or emerald, 3. 'Pushparága' or topaz, 4. 'Mánikya' or ruby, 5. 'Indranila' or sapphire, 6. 'Gomeda' (a yellow gem of the colour of fat), 7. 'Vaidurya' or lapis lazuli, 8. 'Mauktika' or pearls, and 9. 'Vidruma' or corals. They are called 'Navaratna' or nine gems. Two inferior varieties of diamond, called 'Rájavarta' and 'Vaikránta' are sometimes used as substitutes for pure diamond.

Amongst these, diamonds, pearls, and corals only are much used. The rest are used rarely. Diamond is purified by enclosing it in a lemon and boiling it in the juice of the leaves of 'Vaka' or *Sesbania grandiflora*. It is powdered easily by enclosing it in a paste made of the roots of the cotton plant and the juice of some betel leaves and then roasting it in a pit of fire. The process should be repeated seven times. Another method consists in roasting the diamond by enclosing it in a paste made of horn-shaving. The process should be repeated three times.

Pearls are purified by being boiled in the juice of the leaves of 'Jayanti' (*Sesbania aculeata*), or of the flowers of 'Vaka' (*Sesbania grandiflora*); and corals by being boiled in a decoction of the three myrobalans. Both are reduced to powder by being calcined in covered crucibles.

The methods by which the other stones are rendered fit for conversion into medicines are detailed in Part II of this work.

As regards vegetables, all parts are used in medicine, viz., roots, bark, pith, exudation, stalk, juice, sprout, cinders, milk, fruit, flower, ashes, oil, thorns, leaves, sheath (as of a bud), bulbous root or tuber, and shoots. Of vegetables sixteen are root-bearing, and nineteen fruit-bearing.

Of animals the products used in medicine are honey, vaccine secretions (milk), bile, fat, marrow, blood, flesh,

excreta, urine, skin, semen, bones, tendons, horns, hoofs, nails, hair, bristles, and the bright pigment called *Rochand*.

Of urine there are eight principal varieties, *viz.*, that of 1. sheep, 2. goat, 3. cow, 4. buffalo, 5. elephant, 6. camel, 7. horse, and 8. ass. The urine of sheep is bitter, cooling, and neutral as regards its action on the bile. The urine of the goat is astringent, sweet, wholesome, and corrects all diseases of phlegm, bile, and wind. The urine of the cow is slightly sweet, corrective of disorders, destroys worms, and cures lucoderma. If drunk, it cures itching of the body and is highly beneficial in abdominal dropsy. The urine of the buffalo cures piles, swellings, and dropsy, and is alkaline and purgative. The urine of the elephant is saltish, and is good for persons having worms and lucoderma, in retention of stools and urine, poisoning, in diseases of the phlegm, and for piles. The urine of the camel is bitter, and is said to cure asthma, cough and piles. The urine of the horse is bitter and pungent, and is a remedy for lucoderma, carbuncle, and poisoning. The urine of the ass cures epilepsy, and insanity.

The varieties of milk are those of 1. sheep, 2. goat, 3. cow, 4. buffalo, 5. camel, 6. elephant, 7. horse, and 8. women. Almost all varieties of milk are sweet, oily, cooling, glactiphorous, refreshing, nutritious, and aphrodisiac. Milk strengthens memory, body and mind. It promotes vitality ; relieves fatigue, cures asthma and cough, heals hemorrhages caused by disorders of the bile, and aids the cure of wounds and fractures. It is wholesome unto all living beings, soothes and corrects all disorders, allays thirst, promotes the appetite, and is highly beneficial in cases of weakness and ulcers. It is used in errhines, plasters, and baths.

All material objects have six sorts of tastes, twenty sorts of properties, and two sorts of forces or potencies in them.

The tastes are really infinite in number, but six are regarded as principal, the rest being either included in them or are the results of combination. Thus of sweetness there is an infinite variety according only to degree. The same is the case with the five other tastes. The six principal tastes are 1. स्वादु or sweet, 2. खट्ठ or sour, 3. लवण or saline, 4. कटुक or acrid or pungent, 5. तिक्त or bitter, and 6. कषाय or astringent. These six tastes, in course of digestion and after digestion, undergo alteration. Thus things that are sweet become sweet. Saline substances also become sweet after digestion. Acids or sours become acids ; and bitters, acrids, and astringents become acrids. Thus all substances, after digestion, become sweets, or acids, or acrids. In the selection of medicines for the cure of disease, Hindu physicians are guided by the consideration of tastes. In the case of fever, the experience of both the East and the West has proved that bitters form an unfailing remedy. Why should not the other tastes operate as remedial agents in other diseases ? Western physicians should stop to consider this. Amongst the six tastes, the sweet, the sour, and the saline check wind ; the astringent, the sweet, and the bitter, check bile ; and the astringent, the acrid or pungent, and the bitter, check phlegm.

The twenty properties of objects are 1. गुरु (heavy), 2. लघु (light), 3. शीत (cold), 4. उष्ण (hot), 5. तैल्य (oily), 6. शुष्क (dry), 7. मन्द (dull), 8. तीक्ष्ण (keen), 9. स्थिर (immobile or stable), 10. चर (mobile or unstable), 11. मृदु (soft), 12. कठिन (hard), 13. विशुद्ध (clear or transparent), 14. विच्छिन्न (slimy), 15. खर (rough), 16. मयूष (smooth), 17. खलू (gross), 18. सूक्ष्म (subtile), 19. सादृ (solid or consistent), and 20. द्रव (liquid or watery). The two forces are 1. शार्पक (fiery or heating), and 2. शीतक (lunar or cooling).

Besides the above properties, each medicine has a special action of its own. This special action depends upon that

quality which is superior to the usual properties of taste and force. The ultimate cause of this special action of medicines is incomprehensible. The consequences of assimilation or habit require to be attended to in the selection of medicines. Thus virulent poisons, which are certainly destructive of life, may be taken without any evil consequence by a person who has accustomed himself to their use. Poisons administered as remedial agents in the case of such a person can have little or no effect.

The medicines prepared from the ingredients mentioned above have been variously classified. Charaka divides them into fifty classes according to their action on the different parts of the human organism as also according to their curative effects on diseases or on their particular symptoms. The following are these fifty heads :

1. जीवनीय—*Jivaniya*—Medicines which promote longevity.
2. वृंहणीय—*Vringhaniya*—Those which promote nutrition and corpulency of the body.
3. लीखणीय or लीखकार—*Lekhaniya* or *Khinakara*—Those which make the body thin or reduce corpulency.
4. भेदनीय or रेचनीय—*Bhedaniya* or *Rechaniya*—Those which are laxative and promote excretions.
5. सन्धानीय—*Sandhaniya*—Those which promote the union of fractured parts of the body.
6. दीपनीय—*Dipaniya*—Those which stimulate the digestive fire or increase the appetite.
7. बल्य—*Balya*—Those which are tonics or which increase strength.
8. वर्ण्य—*Varnya*—Those which improve the complexion.
9. कण्ठी—*Kanthya*—Those which are expectorants and which improve the voice or cure hoarseness.
10. हृद्य—*Hridya*—Those which promote cheerfulness or relish.

11. तृप्तिघ्न—*Triptighna*—Those which reduce the phlegm and remove a sense of satiety.
12. अर्शघ्न—*Arcoghna*—Those which cure piles.
13. कुष्ठघ्न—*Kushtaghna*—Those which cure leprosy and other skin diseases.
14. कंदुघ्न—*Kandughna*—Those which cure itchiness.
15. कृमिघ्न—*Krimighna*—Those which cure intestinal worms ; anthelmintics or vermifuge.
16. विषघ्न—*Vishghna*—Those which operate as antidotes to poison.
17. स्तन्यजनन—*Stanyajanana*—Those which promote secretion of milk or are galactiphorous in their operation.
18. स्तन्यबोधन—*Stanyacodhana*—Those which improve the quality of the milk.
19. युक्तजनन—*Cukrajanana*—Those which increase the secretion of the semen.
20. युक्तबोधन—*Cukracodhana*—Those which purify the semen.
21. स्नेहोपयोग—*Snehopayoga*—Those which are emollients or which produce smoothness and softness of the skin.
22. स्वेदोपयोग—*Swedopayoga*—Those which are diaphoretics or which produce perspiration.
23. वमनोपयोग—*Vamanopoyoga*—Those which are emetics or which produce vomiting.
24. विरेचनोपयोग—*Virechanopayoga*—Those which are purgatives.
25. आस्त्रापनोपयोग—*Asthāpanopayoga*—Those which are used as enemata.
26. अनुवासनोपयोग—*Anuvdsanopayoga*—Oily enemata.
27. शिरोविरेचनोपयोग—*Cirovirechanopayoga*—Those which are errhines or cerebral purgatives.
28. हर्दि निवृत्त्य—*Chhardinigrahana*—Those which stop vomiting.

29. तृष्णानिग्रहण—*Trishnānigrahana*—Those which relieve thirst.
30. हिक्कानिग्रहण—*Hikkānigrahana*—Those which relieve hiccup.
31. पुरीषसंगृहणीय—*Purishasangrahaniya*—Those which relieve looseness of the bowels and make the stools consistent.
32. पुरीषविरजनीय—*Purishavirajaniya*—Those which alter or improve the colour of the stools.
33. मूत्रसंगृहणीय—*Mutrasangrahaniya*—Those which reduce secretion of the urine.
34. मूत्रविरजनीय—*Mutravirajaniya*—Those which alter or improve the colour of the urine.
35. मूत्रविरेचनीय—*Mutravirechaniya*—Those which increase secretion of the urine.
36. काशहर—*Kāśahara*—Those which cure cough.
37. श्वासहर—*Cvāsahara*—Those which cure asthma or difficulty of breathing.
38. शोथहर—*Cothahara*—Those which cure anasarca or dropsical swellings.
39. ज्वरहर—*Jvarahara*—Those which are febrifuges or cure fever.
40. श्रमहर—*Cramahara*—Those which relieve fatigue.
41. दाहप्रशमन—*Dāhapraśamana*—Those which relieve heat or burning of the body.
42. शीतप्रशमन—*Citapracamana*—Those which relieve the sense of coldness or stop shivering.
43. उदरप्रशमन—*Udarddapracamana*—Those which cure urticaria.
44. अङ्गमर्दप्रशमन—*Angamarddapracamana*—Those which relieve pains in the limbs.
45. शूलप्रशमन—*Culapracamana*—Those which relieve colic pains.
46. शोचिस्तथापन—*Conitasthāpana*—Those which are styptics or which stop hemorrhage.

47. वेदनास्वापन—*Vedanasthāpana*—Those which are anodynes or which relieve pain produced by external causes such as wounds, &c.
48. संज्ञास्वापन—*Sanjasthāpana*—Those which restore consciousness.
49. प्रजस्वापन—*Prajasthāpana*—Those which cure barrenness or sterility.
50. वयस्स्वापन—*Vayahsthāpana*—Those which prevent the effects of age.

Suṣrūta divides medicines into two principal classes, *viz.*,
 1. संशोधन (Sangṣodhana) or correctives, *i. e.*, those which expel from the body everything that should be expelled for preserving or restoring health, such as purgatives, emetics, errhines, &c.; and 2. संग्रामन (Sangṣamana), or those which reduce or diminish the excitement of wind, bile, and phlegm, and restore them to their normal measures. The same author also classifies medicines under thirtyseven heads or groups, named after the first article of each group. The drugs included in each group have some common properties, such as acidity, sweetness, astringency, &c. Many drugs, however, fall under more than one class. *Nighantu* and some later works adopt a classification that is hardly scientific.

Cārangadhara and other writers describe the action of medicines in detail and classify medicines under the following heads :—

1. दीपन—*Dipana*—or medicines which without helping the digestion of undigested food, simply excite the appetite.
2. पाचन—*Pāchana*—or medicines which cause the digestion of undigested food, without exciting the appetite. Some medicines are both *Dipana* and *Pāchana*.

3. अनुलोमन—*Anulomana*—or medicines which restore wind, bile, and phlegm to their normal course by promoting, if necessary, the discharge of excretions.
4. विरेचक—*Virechaka*—or medicines which operate as purgatives. These are classed under three heads :
1. श्रङ्गन—*Srangsana*, 2. भेदन—*Bhedana*, and 3. रचक—*Rechaka*. The first includes those medicines which hurry the chyle or materials for digestion without allowing them to be properly digested ; the second, those which promote the discharge of scybalæ and other contents of the intestines without dissolving or liquifying them ; the third, those which promote the discharge of both the digested and the undigested contents of the intestines after dissolving or liquifying them. The last is subdivided into three classes, *viz.*, 1. मृदु—*Mridu* or mild, 2. मध्यम—*Madhyama* or intermediate, and 3. क्रूर—*Krura* or severe, *i. e.*, drastic.
5. वमन—*Vamana* or emetics, *i. e.*, medicines which expel, through the mouth, bile, mucus, and other contents of the stomach.
6. छेदन—*Cchedana* or medicines which forcibly cut off or remove adherent phlegm and other humours and promote their discharge from the body. Emetics, expectorants, errhines, &c., all fall under this class. Black pepper and alkaline ashes are examples.
7. लघ्न—*Lekhana* or attenuants that gradually clear the body of deranged constituents and thus attenuate or thin the body. Honey, barley, warm water, &c., are examples.
8. स्वेदन—*Swedana* or medicines which promote the secretion of perspiration.

9. मूत्रक—*Mutrala* or those which promote the secretion of urine.
10. स्तन्यजनन—*Stanyajanana* or those which promote the secretion of milk.
11. प्रस्रावि—*Prāndthi* or medicines which expel collected secretions from their respective places. 'Vacha' (*Acorus Calamus*) is an example of this class.
12. ग्रहि—*Grāhi* or inspissants are those medicines which dry the fluids of the body. They are stomachic, digestive, and heating, and hence their operation in the direction indicated.
13. स्तम्भन—*Stambhana* or constipators are those medicines which increase the wind and cause the secretions to be retained. They are drying, astringent, and cooling; hence their operation in the direction indicated.
14. अभिष्यन्दि—*Abhishyandi* or medicines and other articles which, being emollient and heavy, cause a retention of the secretions and bring about a heaviness and fulness of the body. Curds are named under this class.
15. बल्य—*Balya* or tonics are those medicines which increase strength.
16. वृंहण—*Vringhana* or medicines which promote nutrition and corpulency of the body.
17. वाजीकरण—*Vājīkarana* or aphrodisiacs, *i. e.*, medicines which increase the virile power, (Literally, medicines which invest men with the virile power of stallions.)
18. विष—*Visha* or poisons. They are regarded as possessed of five properties: 1. व्यापि (*Vyāpyi*) or capable of affecting the entire system, such as opium, hemp, &c.; 2. सूक्ष्म (*Sukshma*) or capable of penetrating the minutest nerves of the body; 3. विक्षानि (*Vikāci*) or capable of drying the humours, depressing the organ-

ism, and causing a relaxation of the joints ; आग्नेय (Agnēya) or capable of heating or stimulating the system ; and 5. मदामह (Maddāvaha) or capable of robbing consciousness. Taken in large doses, poisons destroy life ; but in small or judicious doses, their action is beneficial, for they restore health and cure many dangerous diseases. Amongst poisons, nine are regarded virulent, and seven mild. The virulent poisons are 1. वसन्तभा (Vatsandbha), 2. हारिद्र (Hāridra), 3. शक्त (Saktu), 4. प्रदीपन (Pradīpana), 5. सौराष्ट्रिक (Saurāshtrika), 6. मङ्गी (Sringī), कालकुट (Kalkuta), 8. हलाहल (Haldhala), and 9. ब्रह्मपुत्र (Brahmaputra). The mild poisons are 1. अहिमेन (opium), 2. गुच्छा (seeds of *Abrus precatorius*), 3. धुतूर (Datura fastuosa), 4. करवीर मूल (the roots of *Nerium odorum*), 5. गारुडिका (Gloriosa superba), 6. अक्ष (the milky juice of *Calatropis gigantea*), and 7. रज्जु (the milky juice of *Euphorbia neriifolia*). The mineral poisons are white arsenic and orpiment. Among animal poisons, only that of snakes is used for medicinal purposes.

SECTION III.

FORMS OF HINDU MEDICINES AND METHODS OF THEIR PREPARATION.

The forms in which Hindu medicines occur or are administered are principally 1. स्वरस (Swarasa), 2. कल्क (Kalka), 3. क्वाथ (Kwātha), 4. फाष्ट (Phāsta), 5. शीत-कषाय (Sita-kashāya), 6. पानीय (Pāniya), 7. प्रमत्ता (Pramathya), 8. खीरपाक (Khirapāka), 9. मन्थ (Mantha), 10. यवगु (Yavagu), 11. अवलेह (Avaleha), 12. चूर्ण (Churna), 13. बटिका (Batikā), 14. गुटिका (Gudikā), 15. मोदक (Modaka), 16. खण्डपाक (Khandapāka), 17. भावना (Bhāvanā), 18. पुटपाक (Putapāka), 19. सन्धानवर्ग (Sandhānavarga), 20. कान्जिक (Kānjika), 21. द्रावक (Drāvaka), 22. सल्लद्रावक (Salladrāvaka), 23. सङ्खुद्रावक (Sankhudrāvaka), 24. आसवदरिष्ट (Asavārishta), 25. घृत (Ghrita), and 26. तैल (Taila). Some of these, as *Bhāvanā*, *Putapāka*, &c., &c., indicate both the processes of preparation and the result of those processes.

By *Swarasa* is meant the expressed juice of medicinal plants and fruits, &c. It is prepared by pounding fresh plants and fruits, &c., in a mortar and then pressing out the juice thereof. The expressed juice is then strained through a piece of cloth.

By *Kalka* is meant paste. It is prepared by grinding dry or fresh vegetable substances, on a stone with a muller, into a paste, adding water, if necessary.

Kwātha means decoctions. The drugs should first be cut into small pieces, or pounded, if necessary. These should

then be boiled over a slow fire. One part of the vegetable substances should be boiled in sixteen parts of water till only a fourth of the water remains in the vessel. The liquid should then be strained through a piece of cloth. When decoctions are made of dry substances, eight parts of water may be used. Decoctions are administered by adding to them salt, honey, sugar, treacle, alkaline ashes, ghee, oil, or medicinal powders, as the case may require.

By *Phānta* is meant infusions. These are prepared by steeping, for twelve hours in the night, powdered drugs in eight parts of hot water. These are administered in the same way as decoctions.

Sita-kashāya means cold infusions. These are prepared by steeping powdered drugs in cold water. Six parts of water are needed for one part of drugs. The steeping should continue for the whole night. The liquid should be strained in the morning.

Pāniya is a weak form of decoction. One part of the medicinal substances should be boiled in thirtytwo parts of water till the water is reduced to half its measure. It is given for allaying thirst in particular diseases.

Pramathya is a kind of decoction. The drugs are first grinded into a pulp which is boiled in eight parts of water till the liquid is reduced to a fourth of its measure. It is administered with the addition of honey.

Kshirapāka means decoction in milk. One part of the medicines is boiled in eight parts of milk with the addition of thirtytwo parts of water. The boiling is continued till the water evaporates and the milk alone is left in the vessel. It is then strained through a piece of cloth.

Mantha means an emulsion of drugs in fine powder with four parts of cold water.

Yavāgu is of two kinds, viz., *Kalkasādhya* and *Kwāthasādhya*. Medicines are sometimes added to powdered rice, wheat, barley, &c., and boiled in water, the proportion being one part of solids to six parts of water. Gruel thus prepared with the pulp or paste of medicinal substances is called *Kalkasādhya Yavāgu*. Gruel prepared with a decoction of medicinal substances is *Kwāthasādhya-Yavāgu*.

By *Avaleha* is meant extract. Decoctions are boiled down to a thick consistence. When properly made, it does not readily dissolve in water. It can be drawn out into wires and will receive impressions of coins or seals. *Avaleha* is administered with the addition of honey, sugar, powders, decoctions, &c.

By *Churna* is meant powders. These are prepared by pounding dry medicinal substances with a pestle and mortar. The pounded substance is strained through a piece of cloth.

Batikā means pills. These are prepared by first making a decoction of medicinal substances and then boiling it down to a thick consistence, and adding some powders of drugs or innocuous articles such as red ochre, &c., as also treacle, sugar, or honey.

Gudikā implies large pills or boluses the method of preparation being the same as that of *Batikā*.

Mollaka implies a bolus larger than *Gudikā*. Medicinal substances reduced to powder are added to cold syrup and stirred with it till the two are properly or uniformly mixed. It should be noted that no boiling is required in this preparation. Syrup should be made with sugar and water, or sugar and the decoction of some drug.

Khandapāka means confections. These are made by adding powdered medicinal substances to syrup, and gently stirring it over a slow fire till the mixture becomes uniform

and intimate and is reduced to proper consistence. Honey is usually added to confections.

Bhadvand implies the maceration of medicinal powders in fluid substances. Powders of drugs, particularly, minerals, are soaked in diverse kinds of fluids such as the expressed juice of plants, decoctions, infusions, &c. These are then dried in the sun. A single operation takes four and twenty hours. It should be repeated several times, the fluid used each time may be the same, or of different kinds. The object, of course, of the process is to obtain the active principle of the drugs subjected to it.

Putapdka means, as the name implies, cooking within a closed cover made of clay. Drugs are first reduced to a paste. This paste is enclosed within leaves of either *Eugenia Jambolana*, or *Ficus Bengalensis*, tied round with a string or fibres of some sort. The leaves are covered with a layer of clay from one-half to one inch in thickness. The whole is then burnt in a fire made of dried cowdung collected from the fields. When the case assumes a brick-red colour, it should be withdrawn from the fire and broken open. The juice should then be expressed of the roasted drug. This juice is administered with the addition of honey, sugar, or other ingredients. Sometimes the roasted drug itself is given in powder or pill.

Sandhnavarga implies medicines that are the products of acetous fermentation.

Kanjika is a sour liquid, with a vinous smell, produced from the acetous fermentation of powdered paddy and other grains. About two seers of powdered paddy are steeped in eight seers of water in a covered earthen vessel for fifteen days, when fermentation sets in. It is a clear, limpid fluid, used for various purposes. It forms a cooling drink in fever.

If mustard seeds, or the seeds of the garden radish, be used instead of paddy, the product is called *Sintāki*. If barley, husked, be first boiled and then steeped in water, the liquid is called *Sauvird*. If the husks of the fried seeds of *Phaseolus Roxburghii* be boiled together with barley and then steeped in water, fermentation sets in and the resulting product is called *Tushāmvu*. If boiled rice alone be used, the resulting fluid is known by the name of *Arndāla*.

Drāvaka are distilled mineral acids. A number of mineral substances or salts are heated in a covered vessel with a tube joined to it, called a retort. The distilled fluid is collected in a vessel of glass. If a shell or cowrie is dissolved when thrown into it, the preparation is regarded as well made. There are two varieties of *Drāvaka*, called *Swalpa-drāvaka* and *Sankhadrāvaka*.

Swalpa-drāvaka is prepared in the following way. Take eight tolās of each of those, viz., alum, borax, chloride of ammonium, sulphide of antimony, impure carbonates of potash and soda, called *Yava-kshāra* and *Sorjji-kshāra*, and rock-salt; six tolās of nitre, and four tolās of orpiment: these ingredients are to be powdered and mixed together; they should then be repeatedly rubbed with lemon juice, and then dried in the sun. The mixture should then be distilled over a fire by using a retort. The distilled product cures spleen, dyspepsia, and other diseases. The dose is two drops.

Sankhadrāvaka is prepared in the following way. Take thirtytwo tolās of sulphate of iron, sixteen tolās of rock-salt, sixteen tolās of alum, and one hundred and twentyeight tolās of nitre. These should be powdered and mixed together and then distilled over the fire from a glass retort. The dose is twelve minims. The tongue should be rubbed

with ghee before taking this medicine. The teeth also should not be permitted to be touched by it.

Asavārishṭa implies medicated spirituous liquors. These are prepared with honey, treacle, and various medicinal substances. The usual proportion of the ingredients is thirty-two seers of water, twelve seers and a half of treacle, six seers and a quarter of honey, and one seer and a quarter of medicinal substances in powder or decoction. The ingredients are placed in earthen vessels and allowed to ferment. When raw vegetables are used, the resulting liquid is called 'Āsava,' meaning fermented wines. When decoctions are used, the fermented product is called 'Arishta.' The fact is, these preparations operate as wines and possess also the virtues of the drugs which have entered into their composition. They are stimulants. As such, they are heating. They have, again, stomachic properties and are easily digestible. They promote strength of body and mind, enkindle the digestive fire, cure insomnia, grief, and disgust for food, and produce cheerfulness and joy. Of both 'Āsavas' and 'Arishtas' there are various kinds. Four and eighty kinds of 'Āsavas' or distilled spirits are mentioned by Charaka. Paddy, fruits, roots, pith, flowers, stalks, leaves, and barks are the eight sources from which they are manufactured. By combining these in various proportions, infinite varieties may be produced ; but only four and eighty kinds are regarded as fit for medicinal use. Six are prepared from paddy ; six and twenty from fruits ; eleven from roots ; twenty from piths ; ten from flowers ; two from leaves ; four from stems ; four from barks ; and one from sugar. (*Vide* Charaka, Lesson XXV, called Yajñah-Purushiyam, of Sutrasthāna.)

Ghrītas are medicated clarified butter. It should be noted that the butter of only vaccine milk should be taken. It

should not, again, be new. Indeed, it should be at least one year old. There are many varieties of *Ghrītas*. These are used extensively by physicians. For the most part, they are for internal administration. The method of preparation chiefly consists in boiling clarified butter with water, or milk, or the decoctions or the expressed juice of vegetable drugs, or with the paste or powder of such drugs obtained by pounding. The usual proportion of the ingredients is this : vegetable drugs in paste, one part ; clarified butter, four parts ; and water, sixteen parts. When liquids thicker than water, such as decoctions or expressed juices, are used, the measure of the solids or the paste is reduced from a fourth to one-sixth or even one-eighth of the measure of clarified butter. Regarding the process of boiling, a few simple rules are observed. The clarified butter is first heated on a fire with the object of causing all watery particles in it to evaporate. It is then purified by adding a little turmeric juice to it. Then the paste of the drugs, and water, or other liquids are added to it. These are all boiled together, till the measure of water evaporates and the measure of ghee only is left. The vessel used for boiling should be of earth, or copper, or iron. The residue in the vessel should be strained through a piece of new cloth. It then becomes fit for use. It is administered with honey, or sugar, or with both. Sometimes the juice of *Citrus medica*, or that of pomegranates, is added. It should be noted that in the preparation of medicated *ghrītas* the object kept in view is to thoroughly imbue the clarified butter with the active principles of the drugs used. The boiling, it should be added, may be *mridu* or mild, *madhyama* or intermediate, or *kshara* meaning hard or overdone. Hard-boiled *ghrītas* are generally used for external administration. Intermediates are used for internal administration. Mild

ones are for use as errhines. They are sometimes administered in the form of pills.

Oils are prepared almost after the same manner as *ghritas*. It should be noted that the oil of sesame seeds is used, unless otherwise directed. The oil should first be heated in order that any water that may be in it may evaporate. It should then be purified by steeping in it, for four and twenty hours, the following drugs : the plant called madder (of the genus *Rubia*), turmeric, the wood of Lodhra (*Symplocos recemosus*), Mustaka (tubers of *Cyperus rotundus*), Naliká (a well-known bark of this name), the three myrobalans (*vis.*, chebulic emblic and belleric), the roots of Bálá (*Pavonia odorata*), and shoots of Ketaki (*Pandanus odoratissimus*). The measure of madder should be about one-sixteenth of the oil in weight, and that of each of the rest should be one sixty-fourth. These articles are all reduced to powder before steeping them. Water should then be added of the same measure as the oil. The compound should then be boiled till the water evaporates and the measure of oil only remains. The boiled product should next be strained through a piece of clean cloth. To it vegetable drugs are then added in the form of paste or decoctions as in the case of *ghritas*. Water is again added, and the compound again boiled till the watery portion evaporating, the measure of oil only remains in the vessel. As in the case of *ghritas*, the vessel should be one of earth, or copper, or iron. The boiled product, when cooled, is again strained through a piece of clean cloth. The residue, separated from all solid particles, is fit for use as medicine. The oil is sometimes subjected to a further process for rendering it fragrant or of an agreeable smell. This process is called *Gandhapāka*. It consists of boiling the oil with several aromatic substances such as cardamoms, cinnamon,

cloves, saffron, Tejapatra (leaves of *Cinnamomum Tamala*), white sandal wood, the wood of aloes, the roots of Jatámángsi (*Nardostachys Jatámánsi*), Cati (*Curcuma Zerumbet*), Mustaka (tubers of *Cyperus rotundus*), Gandhviráj (resin of *Pinus longifolia*), the roots of long pepper, the roots of Ushira (*Andropogon muricatum*), Nakhi (*Unguis odoratus*), the pouch of the civet cat, camphor, Saileya (*Permelia perlata*), the roots of Kustha (*Aplotaxis auriculata*), and many others. As many of these should be given as are available. One tola of each of these articles (or of as many of them as may be available) should be mixed with 4 seers of oil. Of camphor 4 tolas should be taken. The aromatic ingredients should be reduced to paste and boiled with the oil, adding water equal to the measure of the oil. The boiling should go on till the water evaporates and the measure of the oil only remains in the vessel. As regards camphor, musk, *nakhi*, &c., these, without being boiled with the oil, are only added to it.

Besides the oil of sesame, two other kinds of oil are used for medicinal purposes. They are castor oil and mustard oil. The measures of oil, vegetable drugs, and liquids used are the same as in the case of sesame oil ; only the processes of purifying them are different. Castor oil is purified by boiling it with madder, Mustaka (tubers of *Cyperus rotundus*), coriander seeds, the three myrobalans, leaves of Jayanti (*Sesbania aculeata*), Hrivera (*Pavonia odorata*), wild dates, red buds of Vata (*Ficus Indica*), turmeric, wood of Dáruharidrá (*Berberis Asiatica*), the bark called Naliká, ginger, and the sprouts of Ketaki (*Pandanus odoratissimus*). Half a tola of each of these should be taken, and reduced to paste, and boiled with 4 seers of oil, adding as much whey and 'Kánjika.' The boiling should go on till the measure of whey and 'Kánjika' evaporates, leaving that of the oil only in the vessel. The

oil should then be strained through a piece of clean cloth for separating it from all solid particles. After purification it should be subjected to the same processes as the oil of sesame for imbuing it with the active principles of the drugs directed to be used in this connection. Mustard oil is purified by boiling it with emblic and belleric myrobalans, turmeric, Mustaka (tubers of *Cyperus rotundus*), bark of the roots of Vilwa (*Aegle Marmelos*), bark of pomegranate, flowers of Nágakeçara (*Mesua ferrea*), Krishnajiraka (the seeds of *Nigella sativum*), roots of Bálá (*Pavonia odorata*), and the bark called Naliká. Two tolas of each of these should be taken (only of madder four tolas is the measure laid down) and boiled with 4 seers of oil, adding 16 seers of water. The boiling should go on till the measure of water evaporates. Straining the product, it should then be boiled with medicinal substances whose active principles are to be taken and imbued with the oil.

SECTION IV.

THE MODES OF ADMINISTERING HINDU MEDICINES.

Besides being administered internally, medicines of the Hindu pharmacopœa are applied in diverse other ways. These are 1. वस्तिकर्मा (Vastikarma) or injection into the rectum, the urethra, and the female organ ; 2. वर्तिका (Varti) or sticks or suppositories inserted into the rectum and the female organ ; 3. नासा (Nasya) or snuffs for inhalation ; 4. धूमपान (Dhumapana) or inhalation of smoke by the nose or the mouth ; 5. धूपन (Dhupana) or fumigation ; 6. कवाला (Kavala) or gargles ; 7. चिरीवस्ति (Cirovasti) or application to the head ; 8. नेत्रकर्मा (Netrakarma) or application to the eyes as collyria and in other forms ; 9. प्रलेप (Prelepa) or application to the skin in the form of plasters ; 10. प्रदेह (Pradeha) or application to the skin as poultices ; 11. स्वेदन (Swedana) or application of heat to the skin ; 12. अण्ड (Avyanga) or rubbing of oils on the body ; and 13. क्षारकर्मा (Ksharckarma) or application of caustics.

Vastikarma or injections into the rectum, &c., are made by means of a tube from six to eight inches long, with a leathern bag attached to one of its ends. The fluid to be injected is placed within the bag, and the tube is inserted into the rectum. The bag being pressed, the matter within it runs into the anal canal. Generally, the bag is made of the bladder of a bull, or a goat, or some such animal. Injections into the urethra and the female organ are made in the same way. Sometimes when the enemata happen to be a paste, it is inserted with the aid of fingers and rags.

Varti or suppositories are generally made of the size of the thumb or the middle finger. Smearing them with clarified butter, they are gently inserted into the rectum, or the female organ. Sometimes, instead of sticks, soft cotton pads, imbued with the medicines prescribed, are inserted into the female organ.

Nasya are medicated substances which are administered as snuffs. They are divided into two principal classes, *vis.*, *Cirovirechana* or cerebral purgatives, and *Vringhana* or oils. The former relieve cerebral congestion by causing a flow of secretions. The latter cool the head and alleviate ailments of the neck and the chest. 'Cirovirechanas' are of two kinds : 1. *Avapidas* which consist of either the expressed juice of pungent drugs that are poured, drop by drop, into the nose or of powders which are blown into the nose with a tube. By both these means discharges from the nose are caused and the head is cleared ; and 2. *Pradhamana* which consists of medicated oils. These, again, are of two varieties, *vis.*, *Marsha* and *Pratimarsha*. When oil, of the measure of a drachm is poured into the nose with a spoon or small cup, it is called 'Marsha' ; when a few drops only are poured with the direction that the patient should snuff them up vigorously till the oil reaches the throat and then expectorate it up without swallowing it, it is called 'Pratimarsha.'

Dhumapāna literally means 'drinking of smoke.' Hollow sticks are made of medicinal substances. They are lighted at one end, and their smoke is inhaled by the mouth, or the nose, through a metallic or wooden tube. The sticks are prepared by smearing a reed with the paste of the medicinal substances directed to be used, drying it in the shade, and then taking out the reed. The hollow tube of dried medicinal paste is laved with clarified butter before one of its ends

is lighted. The lighted end is inserted into the metallic or the wooden tube and the smoke is inhaled through the other end. The smoke inhaled through the nose should be exhaled through the mouth.

Dhupana or fumigations. The sticks are made in the same way as in the case of inhalations. They are lighted and placed in an earthen vessel having a lid that covers it hermetically. A small hole is made in the lid and a tube is inserted into it. The other end of the tube is directed towards the part that is to be fumigated. The smoke of the burning stick, issuing out of the tube spreads over the affected part. Sometimes medicinal and fragrant substances are burnt in the sick room for removing disagreeable smell.

Kavala are gargles. They are generally taken warm. Sometimes solid or semi-solid substances are kept within the mouth till they cause discharges from the nose or the eyes.

Cirovasti means applications of oil to the head. This is done in four different ways. The first consists of tying a piece of thick leather all round the head. The leather should be at least three inches in breadth. The lower margin should be attached to the skin by means of a paste of the pulse called *Phaseolus radiatus*. Into the hollow made all round the head by means of the leather thus attached, medicated oils are poured and kept for some hours. Violent headaches are relieved by this method. The second method consists in pouring oil on the head. This is called *Parisheka*. The third method, called *Pichu*, consists in applying cotton soaked in oil. The fourth, called *Avyanga*, consists in repeatedly rubbing oils on the head with the aid of the fingers and the palms.

Netrakarma implies the application of diverse kinds of drugs into the eyes. When drops are poured into them

the process is called *Aschotana*. A poultice enclosed within a piece of cloth and applied over the lids is called *Pinda*. Paste applied to the lids is known by the name of *Viddálaka*. Drugs applied to the margin of the lids or to the conjunctiva are called *Anjana* or collyria. Collyria may consist of powders, or liquids, or sticks, or pills. Sticks and pills should be rubbed with water into thin paste. Collyria are applied either with the finger or with a metallic probe made of lead.

Pralepa implies plasters applied moist and cold to the skin.

Pradeha means poultices applied moist and hot to the skin.

Swedana consists in the application of heat to the skin for inducing perspiration. Charaka mentions thirteen kinds of 'Swedana', viz., 1. Cankara, 2. Prastara, 3. Nádi, 4. Parisheka, 5. Avagáhana, 6. Jentáka, 7. Açmaghana, 8. Karshu, 9. Kuti, 10. Bhu, 11. Kumbhi, 12. Kupa, and 13. Holáka.

When sweda is applied by means of pounded drugs placed within a piece of cloth and heated on a fire, it is called *Cankara*.

When it is applied to a person after rubbing him with oil and making him lie down on a stone, or a silken cloth, or a woollen blanket, or on a bed made of the leaves of certain plants, and when the instrument of application is a loose ball made of certain kinds of paddy or of *Vecavára*, or of certain kinds of frumenti, it is called *Prastara-sweda*.

Nádi-sweda is administered in the following way: the vegetable drugs as also the flesh, &c., of certain animals and birds are mixed together with certain acids and salts and oils, and certain varieties of urine and milk. These should be boiled in a covered vessel. The vapour should be conducted through a tube having two or three bends, made of

Saccharum Sara, or bamboo, or some other plant, and applied to the body, previously rubbed with oil, of the patient. In consequence of the bends of the tube, the force of the vapour is broken and its heat becomes bearable.

Parisheka-sewda is administered in a simpler way. Decoctions are prepared of certain vegetable that are known to have the virtue of alleviating the wind. While still warm, they should be gently sprinkled over the body previously rubbed with oil and then covered with a piece of cloth.

Avagaha consists in causing the patient to bathe in a tub or trough of warm water into which has been poured the decoction of certain drugs capable of alleviating the wind. The decoction should be mixed with milk, oil, ghee, and the broth of the flesh of certain animals.

Jentaka-sweda consists in causing the patient, previously rubbed with oil and covered with a piece of cloth, to enter a close chamber properly heated with the fire of certain kinds of wood. Elaborate instructions are laid down about the ground on which the chamber should be erected.

Acmaghana-sweda consists in causing the patient to lie down on a piece of large stone heated by means of a fire ignited upon it. The fire should be swept off and the stone washed with warm water. The patient should be rubbed with oils and covered with skins or blankets or woollen cloth.

Karshu-sweda consists in causing the patient to lie down on a bed spread upon a hole heated with burning but smokeless charcoal. The form of the hole should be like a *Karshu* ; that is, its stomach should be large or spacious, and mouth narrow.

Kuti-sweda consists in causing the patient to lie down within a small chamber having no window or opening. The chamber should be made of earth and the walls plastered

with 'Kushtha' (*Aplotaxis auriculata*), and certain other plants pounded together. Around and over the chamber should be placed earthen vessels containing smokeless fire. The patient's body should be rubbed with oil before he enters the chamber.

Bhu-sveda is administered by a process similar to that in *Acmaghana*. A spacious ground, perfectly level, and unexposed to the wind, should be selected.

Kumbhi-sveda consists in placing a seat over the mouth of a jar containing decoctions of certain drugs. The jar should be buried up to its mouth. Into the decoction heated balls of iron or stones should be thrown. When vapours begin to rise, the patient should be made to occupy the seat over the jar embeded in earth.

Kupa-sveda consists in digging a pit or well in a spot that is unexposed to the wind. The pit should be filled with the dried dung of elephant, horse, cow, ass, mule, and camel. This should be set on fire. When the fire becomes smokeless, a bedstead with a bed upon it should be placed, upon the mouth of the pit, and the patient, after being rubbed with oil, should lie down upon it.

Holdka-sveda is administered in the following way : dried dung of the animals named above should be collected in a circular or round heap. Fire should be set to it. When the dung has been burnt off and reduced to a smokeless fire a bedstead with a bed upon it should be placed over the fire. The patient, well rubbed with oil, should lie down on the bed.

Besides these special methods, Charaka mentions ten others *viz.*, physical exercise, the shelter of a warm chamber, the wearing of thick and warm clothing, hunger, copious drinking, fear, anger, plasters or unguents, battle and sunshine. These also serve as means of *svedana*.

Auyanga consists in rubbing the body of the patient with diverse kinds of medicated oils.

Kshāra-karma consists of caustic applications. Hindu physicians prefer caustics to the lancet for opening abscesses. The ashes of many plants are used for the preparation of caustics. They are principally these :—

अपामाग—*Achyranthes aspera*.

अर्क—*Calotropis gigantea*.

अशकच—*Shorea robusta*.

आरम्ब—*Cassia fistula*.

आखोता—*Vallis dichotoma*.

कदलि—*Musa sapienta*.

करञ्ज—*Pongamia glabra*.

करवीर—*Nerium odorum*.

कुटज—*Holarrhena antidysenterica*.

कीषातकी—*Luffa pentandra*.

गाम्भारी—*Gmelina arborea*.

गुग्गु—*Abrus precatorius*.

चिचक—*Plumbago zeylanica*.

देवदाद—*Cedrus deodara*.

पलाश—*Butea frondosa*.

पाटला—*Stereospermum suave-olens*.

पारिमद—*Erythrina Indica*.

पुलिक—*Cæsalpina bonducella*.

नीपु—*Symplocos racemosa*.

वासक—*Justicia Adhatoda*.

विभिन्नक—*Terminalia Bellerica*.

सप्तपर्णि—*Alstonia scholaris*.

वृषि—*Euphorbia nerifolia*.

The stems, leaves, and roots of these plants are first cut into small pieces, dried in the sun, and burnt in a pit. The ashes are then taken out and boiled in water six times their

weight. The product is then strained, and again boiled with the powder of burnt conch shells. The boiling should go on until the substances become consistent. Shell-lime is added. Sometimes orpiment and realgar also are mixed.

SECTION V.

WEIGHTS AND MEASURES.

In ancient times the scales of weights and measures differed in different parts of India. Four separate scales are mentioned by modern compilers. These are 'Cháraka' 'Sauçruta,' 'Mágadhi' and 'Kálinga.' In all the scales, the 'Gunjá' or a seed of *Abrus precatorius* is generally the lowest weight. It is sometimes subdivided. Thus eighteen mustard seeds, four grains of paddy, three grains of barley, and two grains of wheat, are, respectively, said to be equal to one 'Gunjá.' The scale at present in use in Bengal is as follows :—

6. Gunjás	...	make one	And.
2 Ands (or 12 Gunjá's)	...	" "	Máshá.
8 Máshás (or 16 Ands)	...	" "	Told.
2 Toldás	...	" "	Karsho.
4 Karshas (or 8 Toldás)	...	" "	Pala.
4 Palas	...	" "	Kudava.
8 Palas (or 64 Toldás)	...	" "	Seer or Carívá.
2 Seers	...	" "	Prastha.
8 Seers	...	" "	Adhaka or Pátra.
32 Seers (or 4 Adhakas)	...	" "	Drona
100 Palas (or 12½ Seers)...	...	" "	Tulá.

It should be noted that liquids, like solids, are measured by weights.

There is one peculiarity about liquid measures which should be noticed. When one *Prastha* or more of a liquid is directed to be used in the preparation of a medicine, double the quantity is actually taken. Thus if it is stated in any text that of solid drugs take one seer, of oil take two seers, of milk take three seers, and of water take four seers, the measures to be actually taken are one seer of solids, four seers of oil, six seers of milk, and eight seers of water. For measures below a *Prastha* or two seers, the quantities of liquid, are not doubled

THE
AYURVEDIC SYSTEM
OF
MEDICINE.

PART I.

HEALTH.

"He who duly observes the regulations laid down about the keeping of health, succeeds in living for more than a century."—Charaka.

THE high end of Medical Science is the preservation of health. It is attained by two ways. End of Medical Science. The first is by conquering disease when it invades the body; the second is by observing such rules as keep away disease. The discovery of these rules is generally regarded as more important than the study of disease and of the means of cure. By health is understood the enjoyment of the period supposed to be allotted to man in perfect ease, that is, with cheerfulness and strength and unchanged complexion and the rest. The rules in respect of food and exercise, by observing which a person succeeds in

keeping his health, constitute this branch of Medical Science which is known by the name of Hygiene. Health is certainly a very desirable possession, for upon it depends the proper performance of every act needed for this life and the life to come. If health be absent, all exertion becomes painful that has for its object the acquisition of knowledge and wealth and fame, in fact, the fulfilment of every legitimate desire. Those observances and sacrifices, again, which lead to felicity in the life to come, become impossible in the absence of health. It has been said that if a person possesses all the advantages of life, such as palaces and parks and beautiful gardens and large estates and loving children and relatives, but is bereft of health, his condition is infinitely more miserable than that of one who while bereft of these is in possession of health. Led by such considerations, the authors of ancient Indian medical treatises gave prominence to the subject of health. Their works begin with instructions in respect of those rules by the due observance of which the inestimable boon of health may be within every one's reach. As this work professes to be a repertory of those ancient treatises, it is desirable that the rules relating to the preservation of health should, in brief, be first laid down.

Those persons who are in the enjoyment of health, that is, they in whose constitutions the three forces or conditions, called wind, bile, and phlegm, are in harmony, and who possess the eight constituent elements, *vis.*, the fluids, blood, flesh, fat, bones, marrow, vital seed, and the vital fluid called *Ojas*, in a normal measure, and whose urine, stools, perspiration, and other secretions do not exceed the measure that is proper, should rise from bed at early dawn, *i. e.*, about an hour and a half before sunrise. They should then answer the calls of

Healthy persons and their practices.

nature ; and wash their teeth and mouth, sitting with face towards the east or the north. They should wash their teeth, using as tooth-brush sticks of Karanja (*Galedupa indica*), or Karavira (*Nerium odorum*), or Akanda (*Calatropis gigantea*) or Málali (*Echites caryophyllata*), or Arjuna (*Pentaptera Arjuna*), or Pitasála (*Pentaptera tomentosa*), or Khadira (*Accacia mimosa*), or of any other tree or plant that is pungent, or bitter, or astringent in taste, taking care to first chew one of its ends repeatedly till it assumes the form of a soft brush. They should perform the operation in such a way as not to hurt the gums or draw blood therefrom. They should next clean the tongue with a hook made of gold or silver, or copper, or lead, or brass. The edge of the instrument must not be sharp. Thus washed, the mouth becomes freed from every kind of foetid smell and, as the result thereof, a relish arises for food. Those who are suffering from dyspepsia, or indigestion, nausea, asthma, consumption, fever, abnormal thirst, sores in the mouth, or diseases of the chest, the eye, the head, and the ear, should never use tooth-sticks. They should use powdered chalk or charcoal or burnt earth, or burnt cow-dung. One should wash one's mouth in the afternoon also as in the morning.

The process of washing being over, one should undergo
 Physical Exercise. physical exercise in the proper
 measure. That is regarded as the proper
 measure which brings on drops of perspiration on the forehead accompanied by partially quick and heavy breathing. In other seasons than winter and spring, the measure of exercise should be even less than this, for excess in this direction may lead to such diseases as abnormal

thirst, waste, shortness of breath, palpitation of the heart, bilious hemorrhage, consumption, fever, and irritability of the stomach accompanied by vomiting, &c. Physical exercise, indulged in proper measure, brings about a lightness of the limbs, capacity to bear fatigue and pain, keenness and strength of the digestive fire, loss of fat, and symmetry of shape. Children, those that are aged, and those that are suffering from excitement of wind, or bile, or indigestion, should not indulge in physical exercises. After exercise the body should be gently rubbed, inasmuch as this dispels fatigue and restores ease to all the limbs.

After fatigue has been perfectly dispelled, one should bathe, having first rubbed the whole of the body with oil, particularly the head, the soles of the feet, and the orifices of the ears. Rules about the use of oil. The use of oil makes the body firm, enhances its growth, imparts to it the capacity to endure fatigue and pain, renders the skin agreeable to the touch, and improves the complexion; further, it keeps off decrepitude, dispels fatigue, checks all disorders brought about by vitiated wind, and promotes longevity. Oil rubbed on the head prevents baldness or alopecia, canities or premature whiteness of the hair, as also its decay or falling away. It strengthens the head and forehead and the roots of the hair, promotes the growth of hair, and gives it a fine dark colour. All the organs of the person who rubs oil on the head become cheerful, and sound sleep visits him at night. By rubbing oil on the soles of the feet, their roughness and dryness are dispelled, and sensitiveness kept unimpaired. The other salutary effects of this practice are freedom from restlessness, increase of strength, delicacy of all the limbs, and vigorous vision. The soles are protected

from ugly cracks and the person himself from liability to sciatica, and other forms of contraction of muscles due to excitement or vitiation of the wind. By rubbing oil in the orifices of the ears, deafness is prevented, as also wry neck and dislocation of the cheek-bone and other disorders of the face and head which are due to excitement of the wind. The rubbing of oil on every part of the body is highly necessary. The body, in consequence of this, becomes strong and capable of action. Its durability is secured even as oil rubbed on leather and wood preserves them from decay. After the administration of such correctives as emetics and purgatives, the practice of rubbing oil on the body should not be indulged in. Nor should persons suffering from disorders brought about by excitement of the phlegm, as also those who are suffering from indigestion, use oil for rubbing.

After rubbing the body with oil, one should bathe in a clear stream. If no good stream be available, water first boiled and then cooled should be used. If one wishes to bathe in warm water, such water should not be poured upon the head. The rest of the body may be washed with warm water but cold water should be used for the head. Baths in warm water may promote strength of the body, but if warm water is daily poured on the head, strength of vision as also of the hair is deteriorated. Baths destroy foetid odours of the body and every kind of filth accumulating on the skin. Besides, they prevent a burning sensation of the skin. Sweat and the rest being washed off, good looks are restored. The limbs become light. Sleepiness and itching disappear. The body becomes strong ; longevity is promoted, and the digestive

fire is rendered keen. After a bath, one should first carefully rub the body with a wet towel and then with a dry one. One should next wear clean white clothes and apply sandal-paste and other fragrant unguents. Those who are suffering from facial paralysis, or diseases of the eye, the ear, and the month, or fever with diarrhoea, or inflammation of the schneiderian membrane with loss of the sense of smell, or indigestion, should not indulge in baths. One should not, again, take a bath after having filled the stomach with food. Indeed, baths, when the stomach is full, are productive of many evil effects *

After bath, one should, sitting in a clean place and erect posture, eat. The food eaten should be lukewarm and oily. It should consist of different kinds of edibles, so that all the six tastes may be present, *viz.*, sweet, sour, pungent, bitter, saline, and astringent. It should be nutritive and so prepared that one may have a relish for it. It should, again, be served by a person who bears affection or love for the eater. One should not eat very quickly or very slowly. Silence should be observed during eating. One should not, again, eat without the attention being concentrated on the act. That is the proper measure of food which does not overload the stomach, or produce pain, or cause a sensation of pressure in the chest and the sides. The body should remain light after eating. One should eat till hunger and thirst are appeased and all the organs of sense

* Regarding the capacity of baths to dispel sleepiness and lethargy, the experience of all men agree. It is said that Napoleon Bonaparte, who was frequently obliged to forego sleep, found that a bath in cold water refreshed him greatly in the morning. He regarded a bath as a good substitute for sleep.

become cheerful. That is the proper measure of food which does not prevent one from sitting, or lying down, or walking, or breathing, or talking with ease. The measure of food may depend upon another consideration, *viz.*, the heaviness or lightness of the food itself. As regards all food that is heavy or richly cooked, the measure should be much less than that which would bring about gratification. While, as regards all food that is light, the measure should be that which leads to gratification. Hindu physicians use two words in this connection that are very useful. They are *Tripti* or *Sauhitya*, and *Atisauhitya*. *Tripti* means gratification, that is, the appeasing of hunger and thirst to the full extent. *Atisauhitya* is satiety. Generally speaking, one should eat food that is light till one attains to *Tripti*. If the food happens to be heavy or rich, one should stop at a point below *Tripti*. *Atisauhitya* must, in the case of food that is even light, be abandoned. If the correct measure of food be not observed, various evil consequences are sure to follow. If the measure be insufficient, epistaxis or suppression of urine, may result; the several ingredients of the body will begin to decay, and strength, complexion and longevity also will decline. The mind will be gradually enfeebled, so that memory and intelligence will at last disappear. Manu mentions that on the occasion of a long-extending famine, many of the most noted Rishis entirely forgot their Vedas. When plenty came back, they had to re-acquire their lost knowledge with as much toil as on the first occasion. Insufficiency of food brings about all the disorders that are due to vitiated wind. Excess of food causes wind, bile, and phlegm to be excited simultaneously and brings about many diseases of a very grave character, such as indigestion, loss of appetite, cholera and tympanites. One should not eat sitting in a

dirty place, or at the house of an enemy, or that of a person belonging to the lowest castes, or at such improper times as the morning or the evening twilight, or sitting with face towards the north, or at a time when the food previously taken has not been digested, or with a mind dwelling upon something else, or when one is suffering from such disorders as fever and the rest. Food that is cold, or stale, or dry, or that consists of articles which do not harmonise, such as meat and milk, should be avoided.

After the act of eating is over, one should chew spices enclosed in betel leaves. The spices What one should do after eating. laid down are nutmegs, the scented seeds of *Hibiscus Moschatus*, the fruits of *Cocculus Indicus*, cloves, *Elettaria cardamomum*, camphor, and areca nuts. Such chewing helps digestion by causing a considerable quantity of saliva to go down and drench the food taken. All fœtid odours, again, disappear, and the mouth becomes fragrant. After this, one should lie down for a short space of time, resting on the left side. One should never sleep during daytime after eating. Such sleep excites phlegm and bile and brings on such diseases as jaundice, painful headaches, langour and unsteadiness, as also heaviness of the limbs, loss of lightness of the body, loss of appetite, dropsical swellings, hiccough, inflammation of the schneiderian membrane, loss of memory and intelligence, hemicrania, urticaria evanida, eruptions, itches, procrastination, consumption, sore-throat, nervous debility, fever, and weakness of all the senses. Sleep during daytime is beneficial to those who are fatigued by singing, study, drinking, night-keeping, sexual indulgence, bearing of heavy loads, travel, &c., as also to those who are suffering from indigestion, wounds, thirst, fever with diarrhoea, shooting pains, asthma, hiccup, insanity, or the

pains resulting from falls and blows, and who are of a wrathful disposition, or subject to grief, or are timid, or aged, or weak and emaciated. It is beneficial to children also. Although sleep during the day is generally interdicted, yet it may be indulged in summer which is exceedingly dry and when the rays of the sun are very hot and the measure of the night is much less than in other seasons. Those persons, however, who are of a fatty constitution, or in whom the phlegm predominates, or who are already suffering under diseases due to excited phlegm, or from disorders brought about by poison introduced into the system through food or drink, should not sleep during daytime. One should not, immediately after eating, do any act that involves bodily toil, or travel in a fast-running conveyance, or expose oneself to the heat of the sun or of fire. It is not proper to take food before noon or a long time after it. In the afternoon, when the heat of the sun has abated, one should have a walk in a garden. This conduces to excite the digestive fire, and makes the mind cheerful, and disposes every organ for action. During such a walk one should have one's shoes on. Shoes protect the soles of the feet and also the vision from being weakened. If one has to walk in sunshine, rain, or dew, one should use an umbrella which effectually protects the body against the consequences of these. Within the first fourth part of the night one should take one's second meals. The food should be as described before, and the place and manner of eating the same. Curds should be avoided at night. After finishing one's meals, one should sleep in a dry, clean, and well-ventilated room, stretching the bed on a wooden bedstead or platform. The bed should be soft and suited to the season. The duration of sleep

should be from six to eight hours. It should never be less than six or more than eight hours. Sleep enjoyed in proper measure conduces to nourishment and increase of strength, and promotes cheerfulness, intelligence, and longevity. Sleep of less or more than the proper measure leads to emaciation and weakness, loss of intelligence, and even death. For protecting the body, therefore, sleep of the required measure is as much necessary as food of adequate quantity.

For protecting health it is necessary to indulge in sexual congress in proper measure. The Sexual congress. consideration of season should not be disregarded. Summer is ill-suited to the indulgence. The woman selected should be full of desire and should be a willing party. A woman in her menses, or one afflicted with leprosy and venereal and other infectious diseases, or whose features are ugly or create aversion or whose conduct and practices are opposed to what one can approve, or one who is unwilling or in love with another person, or one who is the wedded wife of another, should never be selected for sexual indulgence. Similarly, in sexual congress, one should not act against the course of nature. The morning and the evening twilight, the day of the full moon and of the new moon, the last day of the month when the sun proceeds from one zodiacal sign to another, and the day also on which a religious rite is performed, for the benefit of one's ancestors, should be rigidly excluded as unfit for sexual indulgence. The places also that should be excluded are temples and houses of worship, the spot where four roads meet, the crematorium, the bank of river or lake or tank, the houses of Brahmans and preceptors, wine-shops or their vicinity, and open spots exposed to the gaze of people. Persons afflicted with fever and other diseases should carefully

abstain from sexual congress. Excessive indulgence, again, produces numerous consequences of a baneful nature.

The year is divided into six seasons, *viz.*, Winter and Winter's end, Spring, Summer, Rainy, and Autumn. Others divide it in other ways, such as Summer, Rainy, and Winter, and the periods intervening between each two of those; that between winter and summer being called spring; that between summer and the rainy being called *Pravish* or ante-rainy; and that between the rainy and winter being called autumn. Following, however, the distribution first set forth, we shall take up winter and its end first. Both these periods are alike and the course of conduct laid down is almost the same for both. In consequence of the constant touch of cold air with the exterior surface of the body, the inner or digestive fire becomes keener. At these periods of the year, therefore, a larger measure of food is needed. If one does not take a larger measure of food in these seasons, the digestive fire consumes the very elements or ingredients of the body. Food consisting of powdered wheat, of sweet and saline taste as also sufficiently oily in the form of cakes, should be taken. The meat of animals living in marshy regions, wine, if one is accustomed to it, milk, diverse kinds of food prepared from milk, and also various kinds of confectionery, are proper for these seasons. Lukewarm water should be used for bathing, drinking, washing the feet and hands, and cleaning the body after answering calls of nature. Warm rooms, and warm beds should be used. Warm cloths made of silk, cotton, and the hair of animals, should form one's apparel in these seasons. Indulgence in sexual,

congress does not weaken the body at such periods. Food possessed of a pungent, or bitter or astringent taste, of food that is light and that is provocative of the wind, exposure to the air, and sleep at day time, should be abstained from. Although the practices prescribed for those seasons are nearly the same, yet some differences must be observed dependent on the severity or otherwise of the cold.

The phlegm that accumulates at the end of winter is capable of being excited and vitiated by exposure to the sun's rays in the spring and of producing various diseases. Correctives, in the form of emetics, should be administered in this season for mitigating the accumulated phlegm. The food that should be taken in this season should be such as is easily digested. The tastes prescribed are the pungent, the bitter, the astringent, and the saline. The meat that should be taken is of the deer, the hare, and such game as francoline partridges and sparrows. If accustomed to it, one may take a little wine of old grapes, and one should also use water that is slightly warm for one's baths, drink, and other purposes. Beds and apparel should be of nearly the same kind as those prescribed for the two previous seasons. Sexual congress with young women is prescribed for this season. Heavy and oily food, the sour and the sweet tastes, and sleep during the day, are not beneficial at this season.

In the summer season, one should eat sweet, cool, and oily food. The drinks also should be of the same kind. The flesh of animals and birds belonging to the forest, ghee, milk, and Cálí rice, are beneficial. In a cool room one may indulge in a little sleep at day time. At night one should sleep in a cool room on a cool

bed. One should also at this season walk in cool gardens and on the banks or shores of clear lakes and rivers. The garments to be used should be made of cotton. Food of saline, sour, and pungent taste, or of heating quality, sexual indulgence, and the drinking of wine, are interdicted. One accustomed to wine may drink a little, mixing it largely with cold water.

In the season of rains the wind accumulated during the summer becomes excited. Hence it is necessary to alleviate it by the administration of oily enemata. The digestive fire becomes very weak in this season; hence food that is very light and easily digestible should be taken. Owing to the presence or absence of rain, this season sometimes puts forth the appearance of winter or summer. Taking note of the character of the weather, one should alter one's practices in respect of food, drink, dress, beds, sleep, and the rest. All drinks and food that one takes in this season should be mixed with a little honey. The meat of wild animals, the flour of old barley and wheat, old rice, and sour, saline, and oily food in a copious measure, are prescribed for this season. The water to be used both for bathing and drinking should be that which falls from the clouds or that which is obtained from wells and tanks, cooled after being boiled. If wine be at all drunk, it should be old, and largely mixed with water and a little honey. Clean cloths made of cotton should be used. One should not expose oneself to the rain or to the vapours that rise from the earth after a shower. Sleep during the day, exposure to the night dew or the rays of the sun, bathing in river-water, physical exercises, and sexual congress, are interdicted.

In Autumn the bile accumulated during the rainy season, coming into contact with the sun's rays, becomes excited. It is necessary, therefore, to alleviate it by administering purgatives, and applying leeches. Food and drink that are easily digestible, and cooling, and possessed of the sweet and the bitter tastes, are regarded beneficial. Flour of barley and wheat, rice, the meat of francoline partridges and sparrows and deer and hare and sheep should be taken. One should bathe in rivers and streams or in water obtained therefrom. Such water should also form one's drink. Clean and fine clothes should be worn. The beds to be used should be soft and pleasing to the touch. One should also enjoy a little of the moon-light in this season. Alkaline ashes, curds, the meat of aquatic animals as also of those that live in marshy regions, the rubbing of oil on the body, and long exposure to the night dew and the east winds, are productive of evil consequences.

Generally speaking, the administration of emetics has been spoken of as proper for the spring ;
 Especial remarks. of purgatives for the autumn ; and of oily enemata for the season of rains. Especial months have been laid down for administering these. Chaitra (March-April) has been indicated as the time for emetics ; Srávāna (July-August) for oily enemata ; and Agrahāyana (November-December) for purgatives.

The different practices laid down for the different seasons should be slightly varied for suiting
 Especial practices for especial individuals. persons of particular constitutions. A person in whose constitution the wind predominates should, in every season, indulge in only such food and drink and such other practices as keep the wind in a

proper state, without, that is, exciting it at all. After the same manner, one in whose constitution the bile or the phlegm predominates, should confine oneself* to such indulgences as do not excite the bile or the phlegm. Food that is oily, warm, and sweet, or sour or saline, total immersion of the body in cold water for bathing, the use of cold water for other purposes, kneading the body, indulgence in agreeable acts, the use of ghee, oil, and oily substances, the administration of oily enemata, and such medicines as promote the strength of the digestive fire, and as are called *Páchanas*, are beneficial in allaying the wind of those persons in whose constitutions the wind predominates. Cooling food and drink, of sweet, bitter, and astringent tastes; use of fragrant scents; wearing garlands of pearls, gems, and flowers, hearing sweet music both vocal and instrumental, conversation with dear and agreeable persons; exposure to cool breezes as also the rays of the moon, roving in delightful gardens and woods, banks of rivers, or breasts and summits of mountains and hills and other agreeable places, as also the use of purgatives and bitter ghees allay the bile of persons in whose constitution the bile predominates. The use of food and drink that are of pungent, bitter and astringent tastes and that are of keen and heating virtue; swimming in water; riding on horses; physical exercise; night-keeping; rubbing the body with substances that are dry, smoking and fasts; wearing of warm cloths and administration of emetics, are resorted to for allaying the phlegm of persons in whose constitution the phlegm predominates. Hence every one carefully noting his individual nature should, according to the best of his power, indulge in these various practices.

Besides these daily practices, and the especial acts
 What one should do who for especial seasons, there are others
 is in search of health. which are laid down for persons
 desirous of keeping up their health. These are meditation on the deity as also prayers and worship, after the performance of ablutions in the morning and also in course of the evening twilight ; reverence for the deities, Brahmans, preceptors and other seniors worthy of respect, assistance rendered to the best of one's power to people in distress and due discharge of the duties of hospitality. One should, to keep health, always keep one's passions under control, drive away all anxieties ; practice humility ; be fearless, modest, forgiving, agreeable in speech, pious, and steady in one's behaviour. One should always wear clean clothes. One's rule of conduct should be to show compassion towards all creatures. One should never seek to appropriate another person's wife or wealth. One should never commit a sinful act or associate with sinners. One should never give out the faults or secrets of others. One should never fall out with good or great men. One should abstain from riding vicious animals or broken cars, or climb tall trees or steep summits of mountains and hills. One should never laugh aloud or sit in awkward attitudes, or lie down on beds spread over uneven or narrow places. One should never yawn, or laugh, or sneeze without covering the mouth. One should abstain from such acts as rubbing the nose for nothing, or grinding the teeth, or striking nail against nail, or bone against bone, or beholding planetary or stellar bodies, or residence alone in house, penetrating into a forest, disuse of napkins and handkerchiefs and use of cloth that is worn for washing the body and rubbing the head during a bath,

suppressing the urgings of nature ; meals, sleep, and sexual congress during the evening twilight ; sojourn at night to any unknown place ; and similar other acts. If it is necessary to go out at night, one should wrap one's head with a long piece of cloth, wear shoes, take a stick in hand, and also a companion and a light. One should never go to an unknown place at night. It should generally be stated, in laying down the rules about health, that one should never do any bodily or mental act that may bring about any evil consequence.

By properly observing these rules about health
The results of observing one succeeds in avoiding disease and the above rules. enjoying the allotted period of life.

As a consequence of this, one succeeds in discharging, without any obstruction, all those duties that relate to this and the other world. One secures, by this, happiness both here and hereafter. It is clear, therefore, that every human being should strive his best to keep his health.

If the rules in respect of health be not observed, various
The consequences of a neglect of the rules. diseases spring up in the body. Sometimes, it is seen, that one, though observant of the rules of health, becomes the victim of wounds and other sudden causes of pain. Whatever the cause, one should always strive to allay a disease when it appears. No disease should be disregarded as slight, since even slight diseases, neglected at the outset, become serious and destructive of life itself. Hence as soon as a disease appears, one should consult a physician and endeavour to apply a remedy. If a disease comes to be regarded as incurable, one should not abstain from ~~submitting~~ ^{submitting} oneself to treatment, for even incurable diseases

have sometimes been removed by patience and skill. When one becomes afflicted with a disease, one should not yield to fear, but quickly approach a physician and informing him of everything proceed according to his advice. Indeed, if the disease becomes serious or incurable, the physician, or parents, relatives, and friends, should not inform the patient of what has happened. They should, on the other hand, comfort the patient by telling him that the disease is slight and curable, since if the patient yields to fear or becomes hopeless, many diseases that are curable become incurable. One or two persons who love the patient and who are agreeable to and trusted by him should be always in attendance upon him and comfort him with agreeable and consoling talk. A patient should never have many people by his bedside, since the presence of many men may soon taint the air in his room and thereby injure him and retard his recovery. The patient should always have a room assigned to him that is dry, clean, and well ventilated. The patient's dress should consist of dry and clean clothes. It should be changed at least twice a day. His bed also should be dry, soft, and clean. If the bed gets fouled for any reason, it should be immediately changed. Ordinarily, the bed should be changed at intervals of two or three days. The attendants should always be watchful and carry out the injunctions of the physician. They should prevent the patient from indulging in any act that may be harmful to him. For treatment, a competent physician should always be called in. Only such physicians should be called as are well versed in the medical scriptures, as are possessed of practical experience, as are properly equipt with medicines and appliances, and as are

compassionate towards men in distress. One should never place oneself under an ignorant or unskilful physician. Even death should not be regretted when it happens in spite of the efforts made by a competent physician to bring about a cure, still one should not place oneself under an unskilful and ignorant physician in expectation of recovery. On this subject the following aphorism, occurring in Charaka's great treatise, is pertinent :—

Vásava's bolt, falling on the head, may spare,
But cure by a quack in the world is rare.

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CHAPTER II.

DIAGNOSIS OF DISEASE.

At the outset must the disease be ascertained; after this, the medicine; after this, should the physician treat the disease with full knowledge—*Charaka*.

One of the essential requisites of treatment is the ascertain-
ment of the disease under
which the patient is suffering. If
the disease be not correctly ascertained, the proper
medicine cannot be prescribed. It has been remarked
by an ancient writer that if a man be not called by his
own name, he will not answer: if, again, he be called by a
name that is not his, he may answer but never willingly
and without wrath. After the same manner, if a
disease be not rightly diagnosed, it will never answer
or obey the physician's commands. Indeed, if the phy-
sician proceeds to treat a disease without understand-
ing its true character, he will never succeed in allaying
it. On the other hand, he will only increase its severity
and even bring about death instead of cure.

Briefly speaking, there are three aids to correct diag-
nosis. They are (i) Instructions re-
ceived from books and teachers, (ii)
Observation, and (iii) Inference. At the outset, the phy-
sician should carefully ascertain every particular about

the patient and his sufferings, and then compare the patient's state with what he has read in books or heard from living teachers. After this he should exercise his power of inference about the causes which have led to the disease and their strength. While ascertaining every particular about the patient, the physician should use all his senses for examining him. For example, the patient's complexion, features, size (leanness or fatness), aspect, as also his stools, urine, eyes, etc., being objects of vision, should be examined by the eye. The history given of the patient's malady and the antecedent circumstances, his groans, if any, the sounds produced from his chest, stomach and other parts of the body, being objects of hearing, should be heard. The smell of the patient's body, of his stools, urine, semen, and ejected matter, etc., should be examined by the nose. The heat of the body, and the course of the pulse, etc., should be examined by the touch. It is not always possible for the physician to employ his own tongue for examining the patient; but in diabetes and other complaints, the sweetness or otherwise of the urine, and in certain diseases, the tastelessness of the whole body, and in bilious hæmorrhage, the taste of the blood, may be ascertained through other creatures, such as ants, crows, dogs, etc. The appearance of little vermin all over the body shows its tastelessness; while swarms of flies sitting over the body show its sweetness. Ants prove the sweetness of the urine. In bilious hæmorrhage, doubts often arise as to whether the blood is life-blood or any vitiated liquid extraneous to the system. In such cases, a little of the liquid should be given to crows and dogs. If these animals drink the blood offered, it should be regarded

as life-blood ; otherwise it is not so. The strength of the digestive fire, the strength of body, the presence and absence of consciousness, the strength of memory and general habits of the patient, should be ascertained by observation of special acts. Appetite, thirst, liking or disgust for food, ease or uneasiness of both body and mind, sleep, dreams, etc., should be ascertained by questioning the patient or his attendants. Diseases sometimes differ very slightly. In such cases, by administering, in a slight dose, a well-ascertained medicine, and marking its effect upon the patient in respect of aggravation or amelioration, the precise disease may be diagnosed. By observing the general and special symptoms of disease, its character about curability or incurability or suppressibility should be settled. By marking those symptoms, again, which go by the name of *Arishtas*, the remoteness or proximity of death should be ascertained.

Amongst the several topics of examination in connection with the diagnosis of disease, the following are of great importance, *viz.*, the urine, the eye and the tongue. Each of these will be taken up separately in the following chapters. The ascertainment, again, of those symptoms which are called *Arishtas* which help the physician in inferring the proximity of death, is attended with great difficulty. Hence, a separate chapter will be devoted to this topic also.

CHAPTER III.

EXAMINATION OF THE PULSE.

AN examination of the pulse consists in feeling the pulse with the tips of one's fingers. The pulse is to be felt at the wrist. In the case of male patients, it is to be felt at the wrist of the right hand and in that of female patients at that of the left hand. There are many other parts of the body where the course of the circulation of blood may be felt. For convenience's sake, however, the wrist is preferred. When the patient is in the last state, his pulse, which cannot be felt at the wrist, may be felt below the ankle-joint, or at the throat or at the chest. The physician should hold with the second, the middle and the ring finger the wrist of his patient, supporting the latter's elbow with his left hand. He should examine the quickness or slowness of the beats and their various other characteristics which may be better learnt from the practical instructions of the preceptor given at the patient's bedside than from any remarks which the writer of a medical text book can lay down.

After one has rubbed one's body with oil, or while one is asleep, or while one is eating, or immediately after one's meals, or while one is hungry or thirsty, or while one is oppressed by the
Times unsuited to the examination of the pulse.

heat of the sun or of fire, or after one has gone through hard exercises, or after a walk, or, indeed, after any exertion or movement of the body involving toil or labour, one's pulse should not be examined. At such times, the pulse becomes excited and quick, and its natural characteristics do not appear.

The pulse of a healthy man is slow and regular. The beats are distinct from one another; their strength also is uniform. For all that, the pulse of a healthy child differs from that of a healthy adult; the former is quicker than that of a latter. Again, the pulse of a healthy adult is not uniform all day long. In the morning it appears to be cool; at midday it seems to be hot; while in the evening it becomes quicker.

Hindu physicians in describing the pulse in disease liken its course to the motions of several animals. Further explanations are given, although they lay it down that a pupil cannot hope to understand the subject without such practical instructions as are capable of being imparted by the preceptor at the patient's bedside. Generally, it is said that in any disease due to excitement of the wind, the pulse is said to assume a curvilinear motion. In any disease due to excitement of the bile, the pulse becomes quick. In any disease due to excitement of the phlegm, the pulse-beats become slow, regular, and heavy. The curvilinear motion, under excitement of the wind, may, it is said, be like the course of the serpent, a leech, &c. The quickness of the pulse due to excitement of the bile may, it is said, be like the motion of the crow, or of the francoline partridge, or of the frog. The slow, regular, and heavy pulse which is due to excitement of the phlegm, it is similarly said, re-

sembles the motion of the swan, the peacock, the pigeon, the dove, the cock, &c. In diseases due to excitement of both the wind and the bile, the pulse assumes the motion sometimes of the snake and sometimes of the frog. When the wind and the phlegm are excited, the pulse resembles the motion sometimes of the snake and sometimes of the swan and the peacock. So when the bile and the phlegm are excited, the motion of the pulse resembles sometimes that of the frog and the other animals named, and sometimes that of the peacock and the other animals already named. In diseases due to the excitement of all the faults, the pulse presents the motion successively of all the animals named. If the pulse, when all the faults are excited, presents resemblances with the motions of the different animals with perfect regularity, that is, if one kind of motion succeeds another in a uniform order, the disease is regarded as easily curable. On the other hand, if the motion becomes irregular, that is, if no uniformity of succession is presented, the disease is regarded as exceedingly difficult.

The course of the pulse, before one has fever, resembles the motion of the frog. It is only
The pulse before Fever. for some time, however, that such a course becomes observable. If the frog-like motion remains unchanged for some time, the fever that will set in will be one accompanied with burning sensation. In fevers due to the excitement of all the faults, the pulse, before their accession, at first presents a curvilinear motion, then an upward motion, and then a slow and quick motion.

When fever has set in, the pulse becomes hot and quick. After sexual congress the pulse becomes hot but not quick. Indeed, this is the difference between the pulse in fever and the pulse after sexual congress.

Generally, in fevers due to excitement of the wind, the course of the pulse resembles the motion of the animals already named. If the fever sets in during those times when the wind begins to accumulate, that is, the summer, the period when digestion goes on, the midday and midnight, the pulse becomes slow and weak. If, on the other hand, it sets in at such times when the wind becomes naturally excited, that is, the season of rains, after digestion, the afternoon, and the close of the night, the pulse becomes heavy, hard, and quick.

In fevers due to excitement of the bile, the pulse shows an absence of indistinctness of beats. It is distinctly felt by the three fingers, *viz.*, the second, the third, and the fourth. It becomes quicker than in other fevers. If fever sets in during such times when the bile begins to accumulate, *viz.*, the season of rains, after meals, the morning and the evening, the pulse shows only these characteristics. If, however, fever sets in at times when the bile becomes naturally excited, *viz.*, autumn, during digestion, midday and midnight, the pulse becomes hard and quick and strong as if it would burst the arteries.

The course of the pulse in ordinary fevers due to excitement of the phlegm, shows those characteristics which appear when there is a marked excess of

phlegm in the system. If fever sets in when the phlegm begins to accumulate, *vis.*, autumn and winter, during meals, evening and close of night, or when phlegm is naturally excited, *vis.*, spring, after meals, morning, and after evening, the pulse becomes as weak and thin as a thread, and slightly cold. The pulse presents no difference of characteristics either at the time when the phlegm begins to accumulate or when it becomes fully excited.

In fevers due to excitement of the two faults, *vis.*, wind and bile, the pulse becomes thick, and hard, and seems to move with an undulatory motion. In fevers due to excitement of wind and phlegm, it becomes slow and hot. If in these fevers the measure of phlegm becomes less than that of wind, it becomes dry, and continuously quick. In fevers due to excitement of bile and phlegm, it becomes thready and weak, sometimes slightly cool and sometimes more so. Its motion also becomes slow.

The pulse in fevers due to excitement of all the three faults, presents the same characteristics as it does when the three faults are excited without bringing in an accession of fever. Besides this, there are some other incidents of these fevers that should be noted in order to judge of their curability or otherwise.

All fevers that are due to excitement of all the three faults, soon become alarming. The premonitory symptoms of death make their appearance without much delay. In such fevers, therefore, certain addi-

The pulse in Fevers due to excitement of two of the faults.

The pulse in Fevers due to excitement of all the faults.

Certain special incidents of the pulse in Fevers due to excitement of all the faults.

tional characteristics of the pulse require to be studied. The fact is, even if the characteristics of all the faults discover themselves in fevers due to excitement of all the faults, yet if, when the pulse is examined in the afternoon, the natural curvilinear motion of the wind be first perceptible, and then the quickness natural to bile, and then the slow motion natural to phlegm, the fever is regarded as easily curable. If the characteristics of the pulse be of a different kind, the fever is regarded as difficult of cure or even incurable. Some other incidents establish the incurability of fevers due to excitement of all the three faults. These are as follow: the pulse sometimes becomes slow, sometimes destitute of tightness, sometimes irregular, sometimes as quick as that of a person in fear, sometimes thready, and sometimes imperceptible. Sometimes it may be felt at the root of the thumb and sometimes not at all. If these characteristics, however, be due to the bearing of heavy weights, or swoons, or fear, or grief, or other reasons of a similar character, the disease does not then become incurable. One thing, however, should be said. Even if all the signs of incurability appear, still if the pulse be perceptible at the root of the thumb, the fever should not be regarded as truly incurable. In other diseases also, as long as the pulse is perceptible at the root of the thumb, they should not be regarded as incurable.

In intermittent fevers appearing on alternate days, the pulse is sometimes felt at the root of the thumb and sometimes by its side. In fevers appearing on every third or fourth day, the pulse very generally becomes hot and its course

appears at first to be gyratory and then seems to gradually recede further and further away. In other diseases, if they happen to be incurable, the pulse shows this very characteristic, but then the heat is not perceptible.

In fevers due to the action of Evil Spirits, the pulse becomes quicker and hotter. In fevers due to wrath, the course of the pulse seems to be curvilinear, and further, two courses seem to combine with each other. In fevers due to violent love, or lust, the same characteristic is presented, but if these fevers become violent or gain in strength, the pulse becomes hot and very quick.

In fevers due to love or lust, the pulse becomes irregular in its beats and hesitating even as the motions of a person who having expected to find at a particular spot a thing on which he has set his heart fails to find it there. If sexual congress be indulged in during fever, the pulse becomes weak and slow. If curds are eaten during fever, the intensity of the fever increases and the pulse becomes hotter.

In fevers brought about by excessive indulgence in food and drink that are sour, the pulse becomes very hot. In fevers due to drinking sour gruel of rice in copious measures, the pulse becomes very slow.

In indigestion, the pulse becomes hard, the beats seem to be indistinct and slow. There are two kinds of indigestion, *viz.*, that which

relates to the *amácaya* and that which relates to the *pakkácaya*. These are the two divisions of the stomach; the former is that into which the food taken finds a place first; the latter is that into which the food passes in its second stage. In indigestion relating to the *amácaya*, the pulse becomes thick, heavy, and slightly hard; in that relating to the *pakkácaya*, it becomes thin and slow. In indigestion brought about by excitement of the wind, the pulse, besides presenting the ordinary characteristics, becomes harder.

In fever with diarrhœa (called Visuchiká) the course of the pulse resembles the motion of the frog. At times, which are frequent, the pulse becomes imperceptible in this disease. For all that, as long as the pulse is capable of being felt at the root of the thumb, the disease should be regarded as curable. In that form of the disease which is known by the name of Vilamviká (Tympanites), the course of the pulse, as in Visuchiká, resembles the motion of the frog. In loss of appetite and in diseases characterised by waste of the ingredients of the body, the pulse becomes thready, cool, and very slow. If the digestive fire be keen, the pulse becomes light and strong.

In diarrhœa, the pulse, after a motion, becomes very weak. In that form of this disease which affects only the *amácaya*, the pulse becomes heavy and composed.

In diseases of the Grahani (the principal duct by which food-juice passes into those organs where it is converted into

blood), the course of the pulse resembles the motion of the swan.

In Strangury, Epistasis, Dysuria, Calculus and other
 • The pulse in suppression diseases in which difficulty is felt in
 of urine and stools, &c. passing urine, whether these are or
 are not accompanied by suppression of stools due to
 intussusception or obstruction of the bowels, the pulse
 becomes subtle, and its course resembles that of the
 frog. In Epistasis and Strangury, the pulse generally
 becomes hard and heavy.

In all diseases whose principal symptom is deep-seated
 The pulse in Cula or pains in the stomach or abdomen, &c.,
 deep-seated pains in the when these are caused by excite-
 stomach, abdomen, &c. ment of the wind, the course of the
 pulse becomes curvilinear; but when caused by excite-
 ment of the bile, the pulse becomes very hot. In that
 form of this disease which affects only the *Andcaya*. or
 in that which is due to the action of worms, the pulse
 appears to be heavy.

The pulse in Diabetes seems now and then to have
 The pulse in Diabetes. knots in its course. If with Diabetes
 there be any disease affecting the
Andcaya the pulse becomes slightly hot.

The motion of the pulse, when the patient suffers
 from a contraction of the bowels or
 The pulse in contraction deep-seated tumours in the abdomen,
 of the bowels, &c. becomes curvilinear. Before, however,
 the symptoms of these diseases are fully developed, the
 pulse seems to have a quick upward motion. In tumours
 of the abdomen, the pulse becomes restless and some-

times seems to have a gyratory motion like that of pigeons 'when they sport in the air, In lunacy, the pulse presents similar characteristics.

In boils, when these are not ripe, the pulse presents the characteristics of excited bile.
 The pulse in boils, &c. In internal boils, it presents the characteristics of excited wind.

In cases of poisoning, that is, when one has swallowed poison or when one has been bit by a piousonous snake, the pulse, as the poison begins to permeate the system, begins to beat very restlessly.

The difference in the course of the pulse is not perceptible in other diseases. It is not necessary to speak of them.
 General remarks. Besides ascertaining diseases by observation of the pulse, the nearness of death itself is frequently ascertained by the presence of certain characteristics of the pulse. We proceed to state what those characteristics are.

If the pulse of a patient, having coursed quickly for sometime, becomes slow or very slow at once, and if the patient is not suffering under any dropsical swelling, death comes on the seventh or eighth day. If the pulse sometimes becomes weak and smooth and curvilinear in its course, and sometimes strong and full and curvilinear, and sometimes, again, very weak and even imperceptible, or, if the pulse becomes weak or full, agreeably to the leanness of the body or its obesity due to dropsical swellings, death comes about a month after. If

the pulse falls off by the breadth of half a barley seed from the root of the thumb, death comes within three days, without doubt. If the pulse be perceptible only below the second finger without being perceptible below the third and the fourth, death comes on the fourth day. If in fevers due to excitement of all the faults, the heat of the body be excessive but the pulse very cool, death takes place at the end of three days. If the pulse for a few seconds becomes very quick and then becomes imperceptible, and again becomes quick and then imperceptible, death takes place within one day. If the pulse becomes sometimes perceptible at the end of the second finger and sometimes imperceptible, death takes place within a day and a half. The person whose pulse beats once or twice as quickly as a flash of lightening at the end of the second finger and then disappears, dies within four and twenty hours from the commencement of such a phenomenon. One whose pulse falls off from the root of the thumb and becomes perceptible for only a few seconds and who experiences a burning sensation in the heart, meets with death as soon as the burning sensation ceases. In other words, his life continues as long as the burning sensation lasts.

The difficulties connected with the examination of the pulse are really very great. Mere instructions, however elaborate, cannot teach the student much. One should repeatedly examine the pulse of as many patients as one can, and carefully observe the peculiarities of its course. A good deal of time must elapse before one can succeed in mastering the subject. The help of the preceptor is absolutely necessary. The patient's bedside and not the lecture-hall

is the place where the subject is to be studied. European physicians recommend the use of the watch for examining the pulse. A rough knowledge may be gained by this method. That minute knowledge, however, which it is the aim of Hindu Medical Science to impart to its practitioners can never be acquired by a reference to the watch alone or the watch and the thermometer also. These are mere mechanical appliances which can never help the practitioner in ascertaining what particular fault has been excited in what precise measure.

Generally, in the case of healthy persons, the pulse-beats vary between 60 and 75 in a minute. With some healthy persons, the beats come so low as 50, or so high as 90, a minute. The number of beats varies according to variations in age. The pulse of the infant in the womb beats about a hundred and sixty times in a minute. After birth, it beats from 140 to 130 times a minute. Till the child attains the age of one year, the beats count from 130 to 115 a minute. Till the age of two years, they count from 115 to 100; till three years, from 100 to 90. From the age of three to seven years, they count from 90 to 85. From seven to fourteen, the number is from 85 to 80. In youth and manhood, the pulse beats about 80 times a minute. In old age the beats count from 65 to 80 a minute.

There are other circumstances according to which the pulse varies as regards its number of beats. During the time of eating and drinking, the action of the heart increases in intensity. The pulse-

Other circumstances according to which the pulse varies as regards its number of beats.

beats accordingly increase in number at such times. Naturally, the pulse of women is quicker than that of men. If the motion of the pulse becomes slower than usual, the person should be taken as having become weaker. Such slowness also is a premonitory indication of congestion of blood in the brain. During fever, the pulse becomes quicker than usual and also hotter. In weakness of the nervous system, the pulse becomes slower and a little full. In all diseases which exist with fever, the pulse becomes quicker than usual. According, again, to the intensity or otherwise of the fever, the pulse becomes quicker or otherwise. In a person of full age, or in diseases due to burns, the pulse seldom counts more than 120 in a minute. If that number is exceeded, the disease must be taken as growing in intensity. If it exceeds 150 a minute, the person is sure to die.

CHAPTER IV

EXAMINATION OF THE URINE.

IN the diagnosis of disease, particularly in ascertaining which fault has been excited, the urine that should form the subject of examination is an important aid. Examination of the urine includes observation of the colour of the urine as also of the signs of its vitiation for ascertaining the fault or faults whose excitement marks the morbid condition of the patient. The urine which the patient passes before day-break after awaking from sleep, should be taken for examination. That which comes out during the first few seconds should be allowed to escape. That which follows should be taken. The vessel which is to be used for holding it should be of glass. During examination, the urine should be repeatedly stirred, and a little oil should be poured upon it drop by drop.

The urine, in health, of a person in whose constitution the wind predominates, is white. The colour of the urine according to difference of constitution. The urine of one in whose constitution the bile predominates, or the bile and the phlegm, resembles oil. The urine of a person in whose constitution the phlegm predominates is muddy. Of one in whose constitution both wind and

phlegm predominate, the urine is thick and white. Of one in whose constitution the blood and wind predominate, the colour of the urine is red. Of one in whose constitution the blood and bile predominate, the urine has the colour of the flowers of the *Kasumbha*. If the known characteristics of diseases do not manifest themselves, it is not safe to conclude the presence of disease from only an examination of the urine.

The urine that is vitiated by the wind becomes oily and pale, or of that darkish hue which is the result of a mixture of black and yellow, or even of a reddish hue. If a drop of oil be poured upon such urine, it spreads all over the surface and small bubbles forthwith begin to rise, topped by minute particles of oil. The urine that is vitiated by bile assumes a red colour. If a drop of oil be poured upon it, bubbles begin to rise. The urine that is vitiated by phlegm is frothy. It looks very much like the muddy water of a small pond. The urine that is vitiated by raw bile, looks like the oil of white mustard seeds. If a drop of oil be poured upon urine vitiated by wind and bile, bubbles will begin to rise of a darkish colour. By pouring oil upon urine vitiated by wind and phlegm, the urine becomes immediately mixed with the oil and looks like fermented gruel of rice. The urine that is vitiated by both bile and phlegm, becomes of a pale colour. If all the faults are excited, the colour of the urine becomes either red or black. The urine of a person in whom all the faults are excited but the bile more than the two others, becomes yellow and red, that is, the upper portion becomes yellow and the lower red. If the

The indications of vitiated urine.

wind be more excited in such a person, the colour of the urine becomes black below the surface; while, if the phlegm be more excited than the two others, the urine appears white in the middle portion.

By observing these characteristics of the urine the physician should conclude which of the faults has or have been excited in what measure. In some diseases, the urine presents certain especial characteristics. Thus, in fevers, if the element called *Rasa* (*i. e.*, food-juice undigested or unconverted into blood) predominates, the urine resembles the juice of the sugar-cane. In fevers which have reached a stage of maturity, the urine resembles that of the goat. In the urine of patients suffering from dropsy of the abdomen, something resembling particles of *ghee* is observable. In diseases characterised by copious discharges of urine, the urine looks red at the bottom of the vessel. If one's food be properly digested, one's urine looks as shining as oil. In indigestion, the urine assumes an appearance that is the reverse of this. In phthisis the urine assumes a black colour. If in this disease the urine assumes a white colour, the death of the patient is certain.

The various aspects of urine in the diverse forms of diabetes will be laid down in the chapter on that disease.

CHAPTER V.

EXAMINATION OF THE EYES.

If the wind be excited, the eyes look fierce, dry, and of a smoky colour. The middle portions become either yellow or reddish, and the pupils are restless. In fact, the pupils appear to be continually rolling. If the bile be excited, the eye becomes hot, yellow in hue, or red, or even green. The patient feels a burning sensation in the eyes and becomes unable to bear the light of a lamp. If the phlegm be excited, the eyes become oily, tearful, white, divested of brilliance, and heavy and fixed as regards their gaze. Under the excitement of two faults, the respective indications of each fault present themselves. If all the three faults are excited, the eyes become either black or red. The gaze loses its straightness. They become sunken. The pupils, losing their normal aspect, become fierce, and at times appear to be covered by a thin film. The eyelids open and shut constantly. Besides these symptoms, the pupils at times disappear. Diverse colours also are seen in the whites. As the disease under which the patient is suffering is gradually conquered, the eyes begin to resume their normal character.

CHAPTER VI.

EXAMINATION OF THE TONGUE.

If the wind predominates in the constitution, the colour of the tongue resembles that of the leaves of the teak (*Tectona grandis*).
Indications of a vitiated tongue.

It may also present a yellow hue, besides being dry, and rough to the touch like a cow's tongue, and cracked. If the bile predominates, the tongue presents a red or darkish hue, while if the phlegm predominates, it becomes white and thick. The prickles over it become confluent, and it constantly secretes saliva. If two faults predominate, the characteristics of each present themselves. If all the three faults are excited, the tongue becomes dark, rough, dry, covered all over with pimples, and looks like a burnt surface.

If the blood predominates and if the patient experiences a burning sensation, the tongue becomes red and hot to the touch.
Indications of the tongue under other circumstances.

In fever accompanied by a burning sensation the tongue becomes deprived of moisture. In acute fever, in diseases characterised by a violent sensation of burning, in indigestion, and in the first stage of the excitement of the wind, the tongue looks white. Besides, it seems to be covered with a foreign coating. In fevers due to excitement of all the faults, the tongue becomes thick and dry and seems to be covered with a dry coating.

Besides, it assumes a dark hue and presents the appearance of a piece of extinguished charcoal. If the action of the liver becomes irregular, and if the bile and stools become obstructed, the tongue presents the appearance of being covered by a coating of pale matter. In enlargements of the spleen or of the liver, during the last stages, as also in consumption, sores appear on the tongue. In acute diarrhœa with fever, swoons due to epilepsy, and asthma, the tongue becomes cool to the touch. In excessive weakness, as also in all diseases accompanied by a burning sensation, the tongue becomes larger. The tongue of a healthy person is always wet. The tongue of one who is given to hard drinking shows cracks and, during reaction, becomes dry.

CHAPTER VII.

EXAMINATION OF THE TASTE OF THE MOUTH.

For ascertaining disease, an examination of the taste the patient experiences is highly necessary. The fact is well known that in different diseases different tastes are experienced. Thus, when the wind is excited, one experiences a saline taste in the mouth. When the bile is excited, the taste that is experienced is bitter. Under excitement of the phlegm, one experiences a sweet taste in the mouth. If two faults are excited, the taste that is peculiar to each is experienced. Similarly, if all the faults are excited, the taste peculiar to each is experienced by the patient. In the two last cases, the taste is the result of a combination, but it is easily capable of analysis. The fact is, two or more tastes, combining together, do not form a single indivisible taste. On the other hand, each is experienced separately or at successive instants of time. The physician who questions his patient for ascertaining the taste the latter experiences, seldom goes wrong in his diagnosis of disease. Sometimes the taste in the mouth proves the existence of disease even if definite symptoms be absent.

CHAPTER VIII.

THE INDICATIONS OF DEATH.

The faults being excited induce disease which spreads over the whole physical system. The indications of death. When disease gains in force, it presents certain symptoms that are regarded as unmistakable prognostications of death. These are called *Arishtas* in Hindu Medical Science. In fact, any symptom from which the nearness of death is inferred, is called an *Arishta*. It is very necessary to note these symptoms in course of treatment. The physician, failing to note them, may take up the treatment of a patient on the point of death. His failure, again, to note them, may cause the greatest inconvenience to the friends and relatives of a patient. The physician should be able to apprise in time the friends and relatives of a patient of the approach of death. From whatever causes death may arise, its premonitory symptoms are sure to appear. The fact is, in some cases these symptoms, though manifested, are not read rightly. The particular symptoms of death, that are manifested in particular diseases, will be laid down in the chapters dealing with those diseases. In this chapter certain general symptoms of death will be noticed that do not belong to any particular disease.

Any sudden change in the constitution or character of a person, involving a direct reverse of what was, is looked upon as an *Arishta*. Thus a person who is of

General symptoms of death.

a fair complexion suddenly becomes dark, or one that is of a reddish hue suddenly becomes yellow or of some other complexion. Similarly one that is of hard limbs, suddenly finds his limbs become soft. A part naturally soft becomes hard, or a limb that is naturally active suddenly becomes inactive, or one that is inactive suddenly becomes active. These changes are regarded as *Arishtas*. So a contraction of some limb that was extended or extension of some that was contracted, shortness of that which was long and length of that which was short, coolness of that which was hot or warmth of that which was cool, dryness of that which was oily or oiliness of that which was dry, and similar changes would be called indications of death. So also a falling down of the eye-brows or their contraction in an upward direction, rolling of the eye-balls, incapacity to hold the head and the neck up, a change in the voice, perspiration on the forehead in the cool of the morning, the appearance of swollen veins on the forehead, the appearance of red pimples in the nostrils, and the sudden appearance of black pimples and pigmentary *nævi* or moles on the whole body, are also regarded as *Arishtas*. If the complexion of half the body or of the face becomes different from that of the other half of the body or of the face, it is regarded as an *Arishta*. If the lips of the patient become black as the fruits of the *Ugenia Jambolana*, it indicates the approach of death. If the patient's teeth become black, or red, or darkish, and if they be covered by a coating of filth, his death is near. A swollen, or black, or rough tongue is an indication of death. If the eyes become contracted, or unequal, or steadfast, or red, and if they discharge fœtid secretions continuously, or

if they lose their compactness, the patient's death must be regarded as near. If the hair on the head become parted of itself, showing lines similar to those made with the help of the comb or the brush, and if it appears oily although no oil has been used, it is regarded as an indication of death. If the eye-lashes drop off or become matted together, if the nose becomes swollen, if dropsical swellings appear when the patient's disease is not dropsy, death should be regarded as near. The patient whose hands, feet, and breath become cool, who inhales air through the mouth, or whose breath is obstructed, or who goes off into a swoon when he attempts to speak, and who lies on his back for a longer time than in any other attitude, and who stretches his legs restlessly hither and thither, generally dies before four and twenty hours elapse. So one who picks at the bed-clothes as if in search of something, or who frequently endeavours to rise up from the bed, is regarded as about to die.

In Ayurvedic works, numerous other symptoms have been spoken of as *Arishtas*. It is scarcely necessary to mention them here. A few will be referred to that are peculiar to particular diseases while those diseases will be treated of.

CHAPTER IX.

THE ASCERTAINMENT OF DISEASE.

Nidāna (causes), *Purva-rupa* (premonitory indications), *Rupa* (symptoms), *Upacaya* (administration of drugs and diet), and *Samprāpti* (fulness or development) are the five principal means for the ascertainment of disease.* That is called *Nidāna* through which the faults become excited and induce disease. *Nidāna* is of two kinds, *viz.*, immediate and remote. Food and drink and acts which are hostile to the constitution, are regarded as the remote *Nidāna* of disease ; while the excited faults that bring about the disease are regarded as its immediate *Nidāna*. *Purva-rupa*, or premonitory indications, are those which manifest themselves before a disease has invaded the system. They are those indications which help the physician to ascertain the kind of disease that is about to appear and the time it will take to appear. *Purva-rupa* is of two kinds, *viz.*, general and special. That by which the mere approach of disease is inferred without the physician's being able to ascertain which of the faults has or have been excited, falls within the first of these two classes. That, again, by which not only the

* It is exceedingly difficult to give accurate renderings of the Sanskrit words *Nidāna*, &c. I, therefore, retain them in the sentence, explaining their meanings as nearly as I can. Further explanations are given in the sentences that follow. These, it is hoped, will enable the reader to understand what is meant by the words.

approach of a disease but also the particular fault or faults which has or have been excited, are ascertained, is regarded as of the second class. When this special *Purva-rupa* becomes fully developed, it becomes what is called *Rupa* or the symptoms of the disease that has actually set in. Sometimes doubts are entertained about the true disease that has invaded the patient. What the intelligent physician does under these circumstances is to administer to the patient such drugs and subject him to such courses of regimen as are contrary to the causes as conjectured of the disease, or to the disease itself as tentatively diagnosed, or to both, and as bring about a mitigation of the symptoms or convalescence or cure. The drugs administered and the regimen prescribed may, at the same time, bring about an aggravation of the symptoms manifested and thus lead to a complete or partial abandonment of the diagnosis. Such administration of drugs and such courses of regimen as the physician has recourse to for more precise ascertainment of the patient's disease and its causes, are called *Upacaya* and *Anupacaya*. Of course, by *Upacaya* is meant the administration of drugs and the subjection of the patient to courses of regimen which bring about either an alleviation of the symptoms, or convalescence, or cure. *Anupacaya* includes the reverse of this, that is, drugs and regimen which produce an aggravation. *Upacaya* is sometimes used as synonymous with successful treatment. It is sometimes also called *Sātmya*, for the drugs and regimen prescribed are seen to be assimilable by or well-suited to the system. It is by *Upacaya* and *Anupacaya* that diseases which are hidden, or those whose symptoms are not manifest, are detected. By *Samprāpti* is meant the full development

of disease through the action, local or extending over the whole body, of the excited fault or faults which constitute the immediate *Nidāna* of that disease.

Sankhyā (number or variety), *Vikalpa* (measure), *Pradhānya* (importance or prominence), *Vala* (strength), *Avala* (weakness); and *Kala* (time), are different incidents of *Samprāpti*. Thus there are 8 kinds of Fever, 5 kinds of abdominal tumours, and 18 kinds of Leprosy, &c. The varieties of each disease are known by the name of *Sankhyā* (number) as an incident of *Samprāpti*. In fevers induced by the excitement of two faults or three, the physician has to determine what particular fault has been more excited than the other or others, and what also is the degree or intensity of that excitement. The ascertainment of these particulars is known by the name of *Vikalpa* (measure). Amongst the faults excited, there may be one whose excitement is due to the *Nidāna* or the cause, as inferred, of the disease. That fault is called *Pradhāna* (prominent); the others are called *Apradhāna* (unprominent or latent). That disease which is induced by its *Nidāna*, and whose *Purva-rupa* or premonitory indications, as also *Rupa* or symptoms, are fully developed, is regarded as strong. The reverse of this is regarded as weak. Time, as an incident of *Samprāpti*, indicates those special seasons or special hours which favour the excitement of the faults whose excitement has induced the disease.

Diseases may generally be classed under two heads.

These are Constitutional and Accidental. Those diseases which are due to the excitement of the faults are called Constitu-

Classification of Diseases.

tutional. If one of the faults be excited, it causes the two others to be excited at least partially. Hence, there is no disease in which only one fault is seen to be excited. That fault, however, which has been first excited, is regarded as the characteristic of the disease. Those diseases which are brought about by wounds and blows, or curses, or incantations, or the influence of evil spirits, are called Accidental. As regards Constitutional diseases, these are brought about by the excitement of the faults due to proper causes. As regards Accidental diseases, these have for their *Nidāna* an wound or blow or a curse, or incantations, &c. These causes, however, bring pain in the first instance and then the excitement of some fault. Excited wind and bile and phlegm constitute the immediate or proximate cause of all Constitutional diseases, that is, of those diseases which are especially regarded as brought about by excited faults; while injurious food and drink and harmful courses of conduct, which lead to excitement of the faults, are remote causes of such diseases. Sometimes it is seen that particular diseases themselves, already developed, bring about other diseases. The former are regarded as the *Nidāna* or causes of the latter. Those diseases which produce others may be merged in them, or may remain side by side with them.

The five incidents mentioned here of *Samprāpti* have been treated in a general way. They shall be treated with particularity in connection with particular diseases

PART II.

F E V E R

LIVING creatures become subject to Fever both at the time of birth and death. This is an ordained law of animal existence. And since fever attacks the body at the time of birth, it is proper to notice this disease first. Besides, fever is the most terrible of all diseases. From fever, again, all the other diseases may spring. These considerations would seem to point out that fever is the foremost of all diseases. Hence, from very ancient times, it is seen that in the division of diseases, fever is noticed first of all. Agreeably to this practice, in this treatise also the subject of fever is taken up at outset.

The general symptoms of fever are bodily heat and mental cheerlessness. No fever is to be seen that is entirely free from such cheerlessness. Besides this, there are a few general indications of this disease such as total stoppage of perspiration and pain in almost every limb.

In fact, that disease in which bodily heat, mental cheerlessness, stoppage of perspiration, and pain in almost every limb, are noticeable, should be known as fever. Amongst these, the stoppage of perspiration is not an essential symptom. In fevers caused by the excitement of bile, perspiration is seen to take place. Although in consequence of the infinite variety of symptoms presented, fever is of infinite kinds, yet for purposes of treatment, it has, in certain medical works, been classed under eight general heads. These are 1. fever born of (excitement of) wind, 2. that born of (excitement of) bile, 3. that born of (excitement of) phlegm, 4. that born of (excitement of) wind and bile, 5. that born of (excitement of) wind and phlegm, 6. that born of (excitement of) bile and phlegm, 7. that born of (excitement of) wind, bile and phlegm, and 8. that which is due to accidental causes.

The general premonitory symptoms of almost all fevers are of the same kind. They are in-
 The general premonitory symptoms of Fever. sipidity of mouth or tongue, a sense of heaviness of the whole body, dislike for food and drink, restlessness of the eyes, tearfulness, excessive sleep, instability of mind, frequent yawning, a desire to contract the muscles, shivering sense of fatigue, errors and delusions, delirium, sleeplessness at night, horripilation, the disposition to grind the teeth, alternate like and dislike for warmth and cool breezes and other cool things, disgust for food, indigestion, weakness, pain in the different limbs, a langour of the whole body, procrastination in every thing that is undertaken, idleness, irritability and a relish for food that is hot, or saline, or pungent, or sour. These premonitory symp-

toms are general ones. Besides these, in consequence of the excitement of wind and the rest, certain special premonitory symptoms are observable. Thus, in fevers born of excited wind, excessive yawning, in those born of excited bile, an excessive burning of the eyes, and in those born of excited phlegm, an excessive repugnance for food, are the antecedent indications. In fevers born of the excitement of two of the faults, the especial indications of those two faults, and in fevers born of the excitement of all the three faults, the especial indications of all the three faults, may be seen along with the general premonitory symptoms noticed above. That every one of these premonitory symptoms would appear is not the rule. According to variations in the intensity of the excitement of the faults, the exhibition becomes partial or full of these symptoms.

The wind and other faults (*viz* bile and phlegm), excited by irregular food and drink and practices, enter into the *Amacaya* and vitiate the *Amajuce*.* The result of this vitiation is heat in the stomach. This heat, originating internally, comes out and manifests itself externally, producing the deranged condition called fever. In consequence of this outward manifestation of internal heat, the skin, in all kinds of fever, becomes hot. This, in fact, is the cause of the development or appearance of fever.

* The *Amacaya* is that part of the stomach which receives food and drink immediately after deglutition. When digestion commences, a liquid substance emanates from the food and drink. This liquid is called *Amarasa*. *Koshitha* is a general name indicating the stomach; sometimes, however, it is used to signify that division of the stomach which receives the digested or half-digested food.

In fevers born of the excitement of the wind, the symptoms observable are shivering, unequal quickness of the pulse, unequal heat of the skin, dryness of the throat and the lips, sleeplessness, incapacity to sneeze, dryness of the body, hardness of stools, pain in the whole body but especially in the head and the chest, insipidity of the mouth, deep-seated pain in the abdomen, tympanites, and frequent yawning, &c. *

The symptoms of Fevers born of the excitement of bile. In fevers born of the excitement of the bile, the symptoms generally observable are excessive quickness of the pulse, watery stools (as in diarrhœa), scanty sleep, vomiting, frequent perspiration, delirium, bitterness of the mouth, loss of consciousness as in swoons, burning sensation in every part of the body, a state of inebriation like that produced by alcoholic drinks, thirst, swimming of the head, sores in the throat, lips and nose, yellow stools and urine, yellow eyes, &c. †

The symptoms of Fevers born of the excitement of phlegm. In fevers born of the excitement of the phlegm, the symptoms observable are mild excitement of the pulse, langour, sensation of sweetness in the mouth, a general sense of heaviness of the body, dislike for food and drink, a sensation of coldness, nausea, horripilation, excessive sleep, catarrhal discharges

These fevers are generally known by the name of Agues.

These fevers are generally known by the name of bilious fevers.

from the mouth and the nose, cough, whiteness of stools, urine and eyes, a sensation of the whole body being, as it were, covered with a wet cloth or blanket, &c.

Of fevers born of (excited) wind and bile, the symptoms are thirst, loss of consciousness, swimming of the head with the sensation of a rotatory motion in the whole body, burning of the skin, insomnia, pain in the body, dryness of the throat and the mouth, vomiting, disgust for food, horripilation, yawns, pain in all the joints, vision of darkness all around, &c.

Symptoms of Fevers
born of excited wind and
bile.

Of fevers born of (excited) wind and phlegm, the symptoms are a sensation of the whole body being wrapped up in a wet cloth or blanket, pain in the joints, excessive sleep, pain in the head, watery secretions from the nose and the mouth, cough, perspiration over the whole body, and excessive heat of the body. The intensity of this fever is moderate, that is, neither great nor low.

Symptoms of Fevers
born of excited wind and
phlegm.

In fevers born of (excited) bile and phlegm, the mouth becomes sticky with phlegmatic secretions and bitter with bile. Besides this, sleepiness, loss of consciousness, cough, disgust for food, thirst, repeated sensations of burning and cold are noticeable.

Symptoms of Fevers
born of excited bile and
phlegm.

Fevers born of the three faults (excited simultaneously), are called *Sannipatika*. In common parlance these are known by the name of *Jawra-vikāra* (or, perverted fevers).

Symptoms of Fevers
due to excitement of all
the faults.

In this fever, alternate sensations of burning and cold are repeatedly experienced. Pain in all the bones, joints, and head, is another marked symptom. The other symptoms are tearful eyes, or eyes of a muddy hue, or deep red. They also become expanded. The corners sometimes fall down. The following symptoms also are observable: ringing and other noises within the ear; a sensation of the throat being struck with the sharp ends of paddy; sleepiness, loss of consciousness, delirium, cough, hard breathing, disgust for food, delusions, thirst, insomnia, tongue as black as charcoal, and as rough to the touch as the tongue of a cow or bull, a relaxation of all the limbs; spitting of blood mixed with phlegm, or bile; rolling of the head; stools, urine, and perspiration scanty. The body is not much reduced in consequence of its being full of all the three faults; an inarticulate sound continually escapes from the throat; sores appear in the mouth and the nostrils; a sensation of heaviness in the stomach is experienced, although no food has been taken for hours together; in consequence, again, of the body being full of aqueous humours, the faults take a long time to digest; dark or red spots resembling wasp-bites, which develop into sores, appear on the body.

A certain stage of this "Sánnipáta" fever is called by European physicians by the name of Pneumonia. Besides the general symptoms noticed above, certain especial ones are observable in this fever. Before the manifestation of this fever the patient experiences very great weakness and utter loss of appetite. During its first stage the indications observable are shivering, vomiting, pain in the chest, headache, delirium, restlessness, and tossing of the arms

and legs. When the disease is developed, the above indications are manifested strongly. A few more symptoms appear, such as these: the chest cannot be even touched without producing pain; the respiration becomes painful; violent coughing; phlegmatic secretions that are thick and sticky and that have a darkish hue like that of the rust on iron. Thrown into or upon a metallic or earthen pot or dish, they adhere to it so strongly that they cannot be easily separated. Sometimes a little admixture of blood is noticeable in these secretions. On the seventh or the eighth day, urine and perspiration become copious; the pulse beats from 90 to 120 every minute; the temperature of the body rises to 103 or 104 degrees. In some cases the temperature reaches to even 107 degrees. The face becomes gloomy and wears an aspect like that of deep thoughtfulness. The cheeks become either red or dark. The lips become parched; the tongue becomes dry and foul; the appetite disappears; eating becomes painful; the power of digestion disappears, and the stools become loose; sleeplessness and incapacity to bear light also manifest themselves. Pimples appear on the face, on the second or the third day. The vitiation of the lungs is one of the principal symptoms of this disease. In many cases the lungs rot away. When the lungs become vitiated, a sort of liquid phlegm is secreted, resembling the decoction of dried plums. When the lungs become rotten, phlegmatic secretions take place that are of a very fetid smell, and that resemble either the cream of milk or puss. When the lungs become vitiated, the disease becomes very difficult to cure. If a burning sensation is felt in the lungs, cure becomes difficult. If a child or an old man, or a woman, especially a woman in the

state of pregnancy, or a person that is addicted to alcoholic drink, catches this disease, it then becomes generally fatal.

- Sannipáta fever is never easy of cure. If the stools•

The duration of Sannipáta Fevers.

and the wind and other faults are tied up, all the symptoms are strongly manifested, and the disease becomes incurable. If the reverse of this occurs, the disease becomes curable but great care is necessary. The critical days are the seventh, the ninth, the eleventh, the twelfth, the fourteenth, the eighteenth, the twenty-second, and the twentyfourth. If the fever gradually decreases in intensity, the three faults (*viz.*, wind and the rest) gradually become light, and the senses recover their clearness and vigour. If sleep returns, the action of the heart improves, the stomach and the body become light, and the mind becomes steady, losing its restlessness. If strength returns, indeed, if these and other favourable symptoms manifest themselves and the critical days are one after another passed, the patient then recovers. If, on the other hand, sleeplessness increases day by day, the numbness of the heart increases, as also the heaviness of the body, disgust for food, restlessness of the mind and weakness. Indeed, if these and other unfavourable symptoms appear, death takes place within the periods indicated. If, at an advanced stage of such a fever, a painful inflammation occurs at the root of either the right or the left ear, the patient rarely recovers. If such inflammation occurs during the first stage, the case becomes curable; and if in the second stage, cure may be brought about but not easily.

A severe form of this fever is called *Abhinyāsa*. When
 Symptoms of the Fever
 called *Abhinyāsa*. the wind and the other faults, ex-
 ceedingly excited, enter the ducts of
 the chest and become mingled with
 the *āma-rasa* (the juice into which food is con-
 verted in the first stage of digestion) and affect the
 organs of knowledge and the mind, the result becomes
 terrible. The fever that sets in, is known by the name
 of *Abhinyāsa*. The patient loses all activity. Vision,
 touch, hearing, and smelling are all suspended. He fails
 to recognise persons standing by his side. He is unable
 to understand what is said to him. He never wishes
 to eat anything. He feels as if a thousand needles are
 pricking every part of his body. He speaks very rarely,
 tosses his head constantly, groans ceaselessly, and fre-
 quently changes sides on the bed. This fever is always
 incurable. Very rarely one may be seen to be cured of it.

Wounds inflicted with weapons, or brick-bats, or
 clenched fists or sticks, incantations,
 The causes and symp-
 toms of Accidental Fe-
 vers. meaning rites performed with the
 aid of *mantras* for bringing about
 disease or death on another person,
 the influence of evil spirits, or of such passions as lust
 and wrath and grief, and curses denounced by Brāh-
 mans,—these are the causes that induce Accidental fevers.
 The particular fault that is excited by any of these
 causes manifests itself prominently in the fever that sets
 in. Such fault is spoken of as the *Anubandha* of the
 fever that appears.

In fevers generated by poisons, the principal symp-
 Symptoms of Fevers
 due to the action of
 poisons. toms are paleness of the facial com-
 plexion, diarrhoea, disgust for food,

thirst, pain throughout the body as if a thousand needles are pricking against it, and loss of consciousness. *

Certain fevers are due to the scent being inhaled of particular herbs and plants. The principal symptoms of such fevers are loss of consciousness, headache, and vomiting.

Fevers born of the scent of herbs and other things.

In fevers born of lust, that is, those brought about by ill-success in obtaining the woman one has set one's heart upon, the principal symptoms are mental restlessness, sleepiness, lethargy, and disgust for food.

Fevers due to lust and love.

In fevers born of fear, grief, or wrath, the principal symptoms are delirium and trembling.

In fevers generated by the incantations of foes and curses (of Bráhmans and other men of puissance), the principal symptoms are loss of consciousness, and thirst,

Fevers due to incantations.

and in those caused by the possession of a person by evil spirits, the principal symptoms are great excitement or anxiety of the mind, laughing, weeping, and trembling of the body.

In fevers born of lust, of grief, and of fear, the wind becomes excited. In fevers born of wrath, the bile becomes excited, and in fevers brought about by association with evil spirits, all the three, *viz.*, wind, bile and phlegm, become excited. The symptoms of laughter or weeping that the patient betrays are due in reality to the

Irregular Fevers.

laughter or weeping of the evil spirit that possesses him for the time being.

That fever about whose accession and exacerbation there is no regularity of time, and about whose heat and violence there is no equability, is called Irregular Intermittent Fever. Its principal characteristic is the absence of continuousness or periodicity of accession and exacerbation. If without treating acute fever properly, some medicine of great energy be administered and the force of the fever be suppressed, the result that follows is that the excited wind or bile or phlegm, instead of being completely allayed, becomes partially suppressed. The suppressed fault gets excited afterwards in consequence of the irregularity of food and practices on the part of the patient, and seizing for its substratum food-juice, or blood, or some other element of the body, induces Intermittent Fever. Sometimes Intermittent Fever appears at once without being developed by acute fever badly treated.

According to difference of symptoms, Intermittent fever is classed under the heads 1. Continuous, 2. Constant, 3. Quotidian, 4. Tertian, and 5. Quartan.

If the excited fault affects the food-juice, it becomes Continuous; if it affects the blood, it becomes Constant; if it affects the flesh, it becomes Quotidian; if it affects the adéps, it becomes Tertian; and if it affects the bones and the marrow, it becomes Quartan.

The first kind, *vis.*, the Continuous, lasts for seven,

or ten, or twelve days at a stretch
 The Continuous Fever. and then leaves the patient for some-
 time to reappear and continue for the same duration.

When the Intermittent Fever appears twice in course
 of a day and night, that is, appears
 The Constant Fever. once during the day and then dis-
 appearing reappears once in the night, it is called Constant.

That Intermittent Fever which appears once in course
 of a day and night, is called Quoti-
 dian.
 The Quotidian Fever.

That intermittent Fever whose paroxysms appear every
 alternate day, is called Tertian.
 The Tertian Fever.

That whose paroxysms appear every fourth day, that
 is, when there is an intermission of
 two whole days, is called Quartan.
 The Quartan Fever.

In Tertian Intermittent fever, if bile and phlegm pre-
 dominates, pain appears in the waist
 Symptoms of Tertian Intermittent Fever born and the back-bone a little before the
 of bile, phlegm and appearance of the paroxysm at
 wind. wind and phlegm predominate, pain
 appears in the back, and if wind and bile predominate,
 pain appears in the head.

In Quartan Intermittent Fever, if phlegm predomi-
 nates, pain appears in the calves if wind
 Symptoms of Quartan Intermittent Fever born predominates, pain appears at first in the
 of phlegm and wind. head, then it spreads throughout the body.

That fever whose paroxysms continue for two whole
 days and then disappear on the next
 Irregular Intermittent Fevers. day to re-appear on the fourth day, is

regarded as a modification of the Quartan variety. There can be little doubt of this last mentioned fever falling within the class called Irregular Intermittent Fever. Some physicians class the fever which is caused by the action of evil spirits under the same head.

In fevers which are characterised by a predominance of phlegm, the patient's body becomes dry, and full of dropsical swellings. Symptoms of Fever born of phlegm. Indeed, the patient becomes overwhelmed by lethargy, and gradually resembles a mass of inert matter.

That fever which appears every day without increasing in violence is called by the name of *Vatavalāsaka*. It is due to excitement of the wind. That fever in which the patient feels his body becoming heavier and heavier, and in which, in consequence of incessant sweating, the patient feels his body as if it were wrapt round with a wet cloth or blanket, is called *Praleṇaka*. This variety of fever appears with mild force. It is very generally observable in cases of Phthisis.

If the food-juice, instead of being digested, becomes vitiated, and if vitiated bile and vitiated phlegm take refuge, one in the upper and the other in the lower region of the body or one on the right side and the other on the left side, the result that happens is that that part of the body where bile has collected becomes hot, while that part where phlegm has collected, becomes cool. If the vitiated bile centres itself in the stomach, and the vitiated phlegm in the hands and feet,

the result observable is that the patient's body becomes hot but the hands and feet remain cool. If the reverse of this happens, that is, if the vitiated phlegm centres itself in the stomach and the vitiated bile in the hands and feet, the consequence is that the body remains cool but the hands and feet become hot.

If vitiated phlegm and vitiated wind centre themselves in the skin or in the juice that feeds the skin, the result is first a sensation of cold and then fever. Subsequently, when the excitement of wind and phlegm becomes allayed, a burning sensation, due to excited bile, follows. This fever is called fever preceded by cold. If vitiated bile centres itself in the skin or the juice [that feeds the skin, the consequence is a burning sensation. When the excited bile is allayed, phlegm and wind induce a sensation of cold followed by fever. This fever is called fever preceded by heat or burning. Both these kinds of fever are due to the excitement of any two or of all the three faults. Amongst them, the fever that is preceded by a burning sensation is productive of great pain and is difficult of cure.

When fever especially attaches itself to food-juice or any one of the seven ingredients of Constitutional Fever. or *Dhātus* of the body, it is called by the name of Constitutional fever.*

* Diseases have been classed under two heads, *vis.*, Constitutional and Accidental. Fevers due to the vitiation of any one of the seven *Dhātus* is called *Dhātustika* fever. I render it Constitutional fever, from absence of a better word. It certainly falls under the general class of diseases called Constitutional. Accidental fevers also are brought about by

In fevers that have centred themselves in food-juice, the general symptoms are a sensation of heaviness throughout the body, an inclination to vomit, actual langour, disgust for food, mental lassitude, &c.

• Symptoms of Fevers centred in food-juice.

In fevers that centre themselves in the blood, the symptoms are a little vomiting of blood, burning sensation in the body, stupefaction of the mind, vomiting, delusions, delirium, appearance of pimples over the face and the body, and thirst.

Symptoms of Fevers centred in blood.

In fevers that centre themselves in the flesh, the symptoms are pain in the calves of the legs, thirst, copious stools and urine, heat of the skin, burning sensation within the body, frequent stretching of arms and legs, weakness of limbs, &c.

Symptoms of Fevers centred in the flesh.

In fevers that centre themselves in the adeps, the symptoms are excessive perspiration, thirst, loss of consciousness, delirium, vomiting, foetid smell in the body, disgust for food, weakness of the limbs, restlessness, &c.

Symptoms of Fevers entered in the adeps.

excitement of any one or any two, or all the three faults, which induces a vitiation of one of the *Dhātus*. But then the remote cause of such fevers is wounds and the like which induce a vitiation of the faults. There can be no disease without the faults being excited. In Constitutional diseases such excitement is regarded as the immediate cause. In Accidental ones, it is regarded as the mediate cause.—T.

In fevers that are centred in the bones, the symptoms are a sensation of all the bones having been broken, suppressed moans, difficulty of breathing, copious stools, vomiting, frequent stretching of arms and legs, &c.

In fevers that centre themselves in the marrow, the symptoms are a vision of darkness all around, hiccup, coughing, sensation of cold, vomiting, a burning sensation within the body, long breaths, cutting pains in the heart or the cardiac region, &c.

In fevers centred in the vital seed, the symptoms are a paralysis of the male organ and a constant emission of the vital seed. The latter, indeed, is chiefly noticeable.

That fever, in which the principal symptoms are a burning sensation within the body, excessive thirst, delirium, difficulty of breathing, delusions, piercing pains in the joints and the bones, suppression of sweat, inability of the excited faults, (wind, bile and phlegm); and retention of stools and urine, &c., is called Fever of Internal strength. That fever in which the external heat is great, and thirst and other parallel indications present themselves in a mild form, is called Fever of External strength.

In the season of rains, the wind becomes prone to excitement; in autumn, the bile; and in spring, the phlegm. The fevers generated by these respective faults, excited respectively in these seasons, are called Natural

fevers. When, however, fevers appear otherwise, that is, when they appear in the season of rains from excited bile or phlegm, or in autumn from excited wind or phlegm, or in spring from excited wind or bile, they are called Perverted Fevers. Natural fevers, except those due to excited wind, are all easy of cure. All Perverted fevers are difficult of cure. In Natural fevers, although only one excited fault is their cause, the two others may always be seen accompanying it in a less excited state.

That fever in which the principal symptoms are a
 Immature or Acute copious discharge of saliva and other
 Fever. secretions from the mouth, an inclination to vomit, a sensation of constrained action of the heart, disgust for food, sleepiness, lassitude, absence of digestion, a sense of disrelish in the mouth, a sensation of heaviness of the whole body, a general numbness of all the organs, loss of appetite, and copious discharges of urine, and which manifests itself with violence, is called Immature or Acute fever.

That fever which begins to mature itself but has not
 Symptoms of Fever reached the state of maturity, shows
 that begins to mature. the following symptoms, *viz.*, violence, thirst, delirium, difficulty of breathing, delusions, inclination to pass stools and urine, and inclination to vomit.

Of a fever that has arrived in a state of maturity,
 Symptoms of Fevers the symptoms are return of appe-
 that are mature. tite, lightness of the limbs, abatement of violence or intensity, and, ejection of wind, bile, and phlegm, as also of stools and

urine. The age of the fever must also be at least eight days.

The super-inducing afflictions that attach themselves to fever are cough, loss of consciousness, disgust for food, vomiting, thirst, frequent and liquid stools or suppression of stools, hiccup, difficulty of breathing, and pain all over the body. These ten symptoms are regarded as the afflictions that attach themselves to fever.

Fever that is curable presents the following characteristics, *viz.*, mild excitement of the fault or faults to which it is due ; an absence of those symptoms which are regarded as afflictions, and continuance of strength in the patient.

Fevers that are incurable have the following characteristics ; attachment to some one of the internal ingredients or *Dhatu*s, length of duration ; excess of insensibility ; excessive weakness of the patient ; dropsical swellings in the body, and appearance of lines dividing and separating the hair on the head. That fever which is brought about by many powerful causes, which is characterised by many complications, and in which the functions of the senses almost disappear, is regarded as fatal. When the symptoms presented are a burning sensation within the body, thirst, constipated bowels, cough, difficulty of breathing, and excess of intensity, the fever is regarded as serious. This fever also is incurable. If, again, the patient, while presenting these symptoms, loses strength, and if his body becomes dry and rough,

it proves fatal. That fever which from the very outset becomes irregular or intermittent, or which continues for a long period, becomes incurable. That fever in which the patient is at once prostrated on his bed, or becomes helpless, or loses consciousness, is regarded as incurable. The fever which is characterised by a sensation of cold in the external parts, but of heat in the internal parts of the body, becomes fatal. That fever in which the patient's bristles stand erect, the eyes become blood-red, or rolling, in which loss of consciousness manifests itself, as also thirst, hiccup, difficulty of breathing, and a piercing pain in the heart, and in which the patient sustains himself by breathing through the mouth, ends fatally. That fever in which a lassitude overtakes the patient and the functions of the senses are gradually lost, in which the flesh is gradually reduced, and disgust for food continues, and whose intensity does not abate, becomes incurable.

Before the disappearance of fevers that are caused by an excitement of all the faults, or that are characterised by internal intensity, or that centre themselves in some *Dhatu*, a sensation of burning, copious perspiration, delusions, thirst, shivering, loose motions, loss of consciousness, suppressed moanings, and a foetid smell of the mouth, manifest themselves.

When fever has been completely suppressed or cured, the indications are perspiration, lightness of the body, itching of the head, sores in the exterior of the mouth, sneezing, and a desire for things having a sour taste.

CHAPTER II.

TREATMENT.

Observance of fast in Acute Fever. In Acute fever, *Langhana* or fast should be observed at the outset. By this, the excited wind or bile or phlegm arrives at a state of maturity, the digestive fire begins to blaze up; the body becomes light, the fever abates in force, and the appetite returns.

Cases in which fast is forbidden. In fevers caused by excitement of the wind, in those that are due to the action of fear, wrath, grief, lust, or excessive labour, in those that are brought about by gradual waste of the *Dhatu*s or constituent elements of the body, and in those super-induced by phthisis, fast should not be prescribed. For those persons also in whose constitutions the wind predominates, or who have keen appetite or excessive thirst, or who have sores in their mouths, or who are subject to illusions (in consequence of weak understandings), or in the case of those who are of tender years or who are advanced in age, or who are weak, or who are in a state of pregnancy, fast is not proper. Already weak, they should not be further weakened.

Effects of improper fast. Improper fasts produce many mischiefs, such as pain in the bone-joints or in all the limbs, cough, sores in the mouth, loss of appetite, disgust for food, thirst, weakness of vision and hearing, restlessness of mind and delusions, eruptions

and loss of consciousness.

Fasts duly observed in due measure lead to a due discharge of stools, urine, and wind, lightness of the body, perspiration, clearing of the mouth and throat, disappearance of sleepiness and langour, liking for food, simultaneous appearance of hunger and thirst, cheerfulness of mind, and eructations unaccompanied by bad odours.

From the first to the eighth day, the fever is said to be in an immature state. Treatment in immature state. During this period no *Pāchanas* or medicines of any other kind should be inflicted. All that can be administered at this stage is the medicine known as *Shadanga-pāniya*. For the digestion of the faults a decoction may be given of the following :—

Coriandrum Sativum—1 Tola ; Leaves of *Trichosanthes dioica*—1 Tola ; or a decoction of dry ginger, the bark of *Cedrus Deodara*, *Coriandrum Sativum*, *Solanum Indicum*, and *Solanum Xanthocarpum*.

After the expiration of eight days such *Pāchanas* as Treatment in mature state. are curative of fever, or other medicines, may be administered. In these days, however, through climatic and other changes, fever becomes so violent or serious within a short time of its appearance, that the physician, without waiting for 8 days, must with discrimination administer medicines within that time for allaying its symptoms and keeping the patient alive.

In continuous or remittent fever, the decoction of the seeds of *Holarrhena Antidysenterica*, the leaves of *Trichosanthes dioica* and

Treatment in the remittent fever.

Picrorrhiza Kurroa, if administered, purges the bowels twice or thrice. After this, the fever disappears. If the bile predominates in such fever, then for the seeds of *Holarrhena antidysenterica*, either *Coriandrum Sativum*, or *Oldenlandia biflora*, may be substituted. If the patient be weak, this sort of *Pachana* which operates as a purgative should not be administered. Besides the medicines mentioned above, there are others, such as *Jwardnkuca*, Swachchanda Bhairava, Hinguleswara, Agnikumára, and Sree-Mrityunjaya (of the red variety), pounded with honey and mixed with the juice of the leaves of *Ocimum Sanctum*, may be administered. These medicines may be used after the disappearance of the fever.

In fevers caused by excitement of the wind, the juice of *Asparagus racemdsus* and *Tinospora cordifolia*, mixed with a little

Treatment in fevers due to excitement of the wind.

treacle, may be given. Also, the decoction of the roots of *Piper longum*, *Tinospora cordifolia*, and dry ginger, or any of the following *Pachanas*, viz., the five roots beginning with those of the *Ægle Marmelos*, or that beginning with *Agathotes Cherayta*, or that beginning with *Vanda Roxburghii*, or that beginning with *Piper longum*, or that beginning with *Tinospora cordifoli*, or that beginning with *Vites Vinifera*, may be profitably administered.*

* In Hindu Medicines, *Pachanas*, which are combinations of diverse plants and herbs, their fruits or roots or barks, are always named after the tree or herb that is mentioned first; hence, Vilwádi, Kirátádi, &c. All those will be explained in the proper place.—T.

In fevers due to excitement of the bile, decoction of
 Treatment, in fever *Oldenlandia biflora*, or of *Oldenlandia*
 due to excitement of the *biflora*, *Pavonia odorata*, and *Ptero-*
 bile. *carpus Santalinus*, should be admi-
 nistered. Besides these, any of these *Pāchanas*,
viz., that beginning with *Holarrhena antidysen-*
terica, or that beginning with *Symplocos racemosa*, or
 that beginning with *Trichosanthes dioica*, or that begin-
 ning with *Hedysarum Alhagi*, or that called *Trāyamāna*,
 and others of the kind, may be given profitably to the
 patient.

In fevers born of excited phlegm, decoction of the
 leaves of *Vitex Nigundo*, with pow-
 Prescription in fevers dered *Piper longum* thrown over it,
 due to excitement of the should be given. The decoction of
 phlegm also the Ten roots, as also of the roots
 of *Justicia Adhatoda*, is very beneficial. Or, instead of any of
 these, the decoction of the group beginning with *Piper longum*,
 or the *Pāchana* made of the substances beginning with
Picrorrhiza kurroa, or that made of those beginning with
Melia Azadirachta, may be administered.

In fevers caused by the excitement of two faults,
 Treatment in fevers *Pāchanas* should, with great discri-
 due to excitement of two mination, be selected. They should
 of the faults. be such as may allay the two par-
 ticular faults that have been excited. In fevers due to
 the excitement of wind and bile, the *Pāchanas* that are
 prescribed are these, *viz.*, that called *Navānga*; that called
Panchabhadra; that made of the substances beginning
 with the three fruits; that made of those beginning with
Solanum Xanthocarpum; and that made of those beginning

with Liquorice.

In fevers, caused by the excitement of wind and phlegm, the patient should be given the expressed juice of the leaves and flowers of *Justicia Adhatoda*, mixed with honey and sugar, to drink. In fevers accompanied by bilious hemorrhages, or by jaundice, the expressed juice of the leaves and flowers of *Justicia Adhatoda*, is very beneficial. In fevers caused by excitement of wind and phlegm, the following *Pachanas* are prescribable, *vis.*, that made of the substances beginning with *Tinospora Cordifolia*; that made of those beginning with *Cyprus rotundus*; that made of those beginning with *Berberis Asiatica*; that called *Chaturbhadra*; that made of the seven drugs beginning with *Cissampelos hernandifolia*; and that made of those beginning with *Solanum Xanthocarpum*. In this fever, the application of heat by means of heated sand-grains, is beneficial. The process is this: the sand should be heated on an earthen vessel; a piece of cloth should be taken; upon it should be stretched some leaves of *Ricinus Communis*, or of *Calotropis gigantea*, or betel leaves; the heated sand should be thrown upon those leaves, and then a small quantity of *kanji* (infusion kept for a long time of boiled rice) should be sprinkled over it; the cloth should then be bound up into a spherical ball. That ball should be applied to every part of the patient's body excepting the breast. As an effect of this application, the pains in the patient's head and limbs becomes considerably allayed.

In fevers caused by excitement of bile and phlegm, the following *Pachanas* should be prescribed, *vis.*, that made of the

Treatment in fevers
due to excitement of bile
and phlegm.

substances begining with *Trichosanthes dioica*; that made of the eight substances beginning with *Anrila* (*Tinospora cordifolia*), and that made of the five bitters.

In all these fevers, in their acute stage, during periods of remission or intermission, the following medicines, such as Sarvajwarāṅkuca pills, Chandecwara, Chandraçekhararasa, Vaidyanath pills, Navajwarebhasingha, Mrityunjayarasa, (of the dark variety,) Prachandecwara, Tripura-Bhairavarasa, Çitāri Rasa, Kaphaketu and Pratāpmārtandarasa, &c., should be prescribed, the selection to be made according to the particular fault or faults that has or have been excited, and directing the use of that vehicle which may be most beneficial.* Pulverised *Aconitum heterophyllum*, (6 Ratis), may be administered three or four times, at intervals of two or three hours. Pulverised *Piper longum* (2 Ratis), mixed with pulverised kernel of the seeds of *Guilandina banducella* (of the measure of 4 Ratis), may also be administered. Both these have been found to be beneficial.

In fevers brought about by the excitement of all the faults, the physician should first attend to the evils that may be brought about by the undigested food in the stomach and by phlegm.

Treatment in fevers due to excitement of all the faults in its first stage.

* The names of Hindu Medicines are generally poetical. Their significations are interesting. For example, "Sarvajwarāṅkuca" means that which acts on all fevers like a goad or sharp hook on an elephant; Chandecwara, Chandraçekhara, and Vaidyanath are names of Civa, the patron diety of physicians and drugs. "Navajwarebhasingha" is "lion to the elephant represented by an acute fever," implying that this medicine destroys a fever how violent or strong it may be, &c.

Afterwards, bile and wind may be attended to. For assisting the digestion of the undigested food in the stomach, *Pāchanas* made of the group beginning with *Pancha-Kōla*, and that beginning with *Cassia fistula*, should be administered. For alleviating the excited phlegm, dry ginger, *Piper longum*, and *Piper nigrum* should be pulverised, and mixing it with rock salt and juice of ginger, should be kept in the mouth, and the patient should repeatedly spit without throwing out the medicines. If this be done three or four times a day, at proper intervals, the dry and thick phlegm that has accumulated in the chest, sides, head, and throat, or pulmonary regions, is sure to come out. By repeatedly administering, again, a cerebral purgative prepared with the juice of the *Citrus Medica* mixed with the three varieties of salt, *viz.*, rock-salt, *Vit.*, and Sonchal, the phlegm becomes thin and is secreted out.* If the patient becomes unconscious, the following may be administered as a cerebral purgative: take in equal quantities some roots of *Piper longum*, rock-salt, and flowers of *Piper longum* and of *Dioscorea aculeata*. These should be reduced to powder. With a measure of this powder should be mixed an equal quantity of

* In Hindu Medicine, various kinds of salt are used. The principal ones are "Saindhava" or rock-salt, so called from Sindhu, the modern Sindh, the country whence it used to come in former days. 'Sāmudra,' or that produced from the sea or sea-waters. 'Vit' occurs in dark, red, shining granules somewhat resembling coarsely powdered lac in appearance. It has a mild, saline and nauseous taste. 'Sauvarchala,' called also 'Sanchāl' and 'Kālanimak' is aromatic, agreeable and digestive. 'Romaka,' called also 'Sākambari,' comes from the lake Sambhar in Rajputana. 'Audbhida' is manufactured from the earth. The ashes of various plants, again, are utilised for manufacturing salts.

black pepper reduced to powder. It should then be dissolved in a quantity of hot water. It is this hot water that should be frequently administered as a cerebral purgative. The patient will then recover consciousness, and such symptoms as sleepiness, delirium, and heaviness of the head, will disappear or be considerably alleviated. For curing sleepiness, a cerebral purgative may be used consisting of the following articles taken in equal quantities, *viz.*, rock-salt, seeds of *Moringa pterygosperma*, mustard seeds of the white variety, and *Applotaxis auriculata*. These should be reduced to a paste with the urine of the goat. A collyrium, applied to the eyes of the patient, made of the following substances, will bring back consciousness: seeds of *Mimosa sirissa*, *Piper longum*, black pepper, rock-salt, garlics, Realgar, and *Acorus calamus*. These should be taken in equal quantities, and a paste should be made of them with cow's urine. If the head be very hot, the eyes bloody in hue, and a severe headache appears, the following medicine may be applied with effect: take of nitrate of potash above half a *tola*, and of Ammonia half a *tola*. These should dissolved in water of the measure of one *seer*. A piece of cloth, properly drenched in this water, should be folded up and applied to the temples and the crown of the head. Drenching it repeatedly in that water, it should be applied repeatedly to those particular parts. Such application is certain to alleviate the heat and pain in the head. In this fever, the following Páchanas may be administered, *viz.*, that called Kshudrádi, that called Cháturbhadra, that made of the five roots, that made of the ten roots, that made of the drugs beginning with *Cyperus pternuis* that

called Chaturdacāṅga, the three varieties of that called Ashtādacāṅga, that called Bhārgyādi, that made of the group beginning with *Circuma Zerambet*, that made of the group beginning with *Solanum Indicum*, that called Vyashādi, and that made of the group beginning with *Ipomœa Turpethum*. The following medicines also may be used, *vis.*, simple Kasturibhairava, compound Kasturibhairava, Ğleshmakālānala rasa, Kālānala rasa, Sannipāta-bhairava, Vetāla rasa, and others of the kind.

If in fevers caused by the excitement of all the three faults, the body becomes cool and the pulse weak, the following medicine should be given three or four times : *vis.*, Makaradhwaja of the measure of one Rati, musk of the measure of one Rati, and camphor of the measure of one Rati, grinding together in a little honey. To this should be added two *tolaks* of the juice of betel-leaves or of ginger. This should be administered three or four times to the patient. Considerable benefit will result from it. At such a time, Mrigamadāsava, Mritasanjivani Sura, and the medicine which we have dubbed by the name of "Kasturikalpa rasāyana," may, with discrimination, be administered. When the patient's vision, hearing, and speech are gradually failing, the pulse is sinking, and consciousness disappearing, the medicines that should then be administered are Suchikābharana, Ghora-nrisingha, Chakri (Chāki), Brahmarandhra Rasa, and others of great potency.

The disease which in European medicine is called Pneumonia is not, according to Hindu physicians, a separate disease. It is a stage of fever due to the excite-

Prescription in fevers due to excitement of all the faults in the second and the third stages.

Prescription in Pneumonia.

ment of all the three faults. In that stage the remedies to administer are the several *Páchanas* already named, as also Lakshmi-vilása, Kasturi-bhairva, Kapha-ketu, and those varieties of medicines which are prescribable in Phthisis. These remedies require great discrimination in their application, for their potency is very great.

In that fever which is distinguished by the name of "Abhinyása,"* the *Páchanas* called
Prescription in fever called Abhinyasa. Kárvyádi and Çringádi, and the medicines called Swachchanda-náyaka, as also all those named above as prescribable in fevers characterised by excitement of all the faults, should be administered.

In acute fever, especially when it is characterised by excitement of all the three faults, in
Symptoms in acute fever. consequence of the violence of their excitement or of acts of indiscretion, various supervening symptoms of a violent character manifest themselves. These supervening symptoms are more dangerous than the original disease, since, if not alleviated, they bring on death soon enough. The physician should set himself to treat these supervening symptoms first.

After the manifestation of fever characterised by excitement of all the faults, an inflammation sets in, in some patients, of the region called the root of the ear.
Inflammation in fevers due to the excitement of all the faults and its treatment. This inflammation, in many cases, proves fatal. If it appears during the

* Its symptoms have been described before. *Vide ante*, page 58. It is a violent form of fever, in which the patient has no consciousness, &c.

first stage of the fever, it is regarded as curable; if during the middle stage, it may be cured, but the cure is effected with great difficulty. During the first stage of the inflammation, leeches should be set for sucking as much blood as they can. Plasters may be applied, made of yellow Ochre, *Pāngá* salt, dry ginger, *Acorus calamus*, and rye, taken in equal measures and reduced to a paste with a sufficient quantity of sour gruel; or of *Dolichos biflorus*, *Myrica sapida*, dry ginger, and *Nigella sativa*, taken in equal measure, and reduced to a paste with a sufficient quantity of water. Both the plasters must be heated on fire before application. If the inflammation, instead of subsiding under such treatment, continues, it should then be allowed to reach the state of suppuration. Linseed poultice, properly heated, should be applied. Repeated applications of such poultice would lead to suppuration. When the state of suppuration has been reached, surgical operation should be resorted to. For curing the opening or the wound, garlic oil, or our own "Kshatári" oil, in addition to daily washing and dressing, should be resorted to.

CHAPTER III.

TREATMENT OF THE SUPERVENING SYMPTOMS OF FEVER.

IN fevers characterised by excitement of phlegm, if there be excessive thirst, it is not advisable to give the patient much water to drink. A quantity of water should be properly boiled and then allowed to cool. In it should be dissolved a little quantity of white sandal paste. Taking a small quantity of cumin seeds and tying them up in a little piece of cloth, soak them in the water thus prepared. The patient may be made to suck, as often as he likes, the cumin seeds thus tied together and soaked. In this way the thirst may be alleviated, or, ice may be given now and then. The best remedy, however, is the medicated drink called Shadanga-pániya.

If the burning sensation of the body be great, the juice of *Celsia coromandeliana* should be rubbed on the body. Or, pounding a quantity of *Ptychotis ajowan* with the juice of *Euphorbia neriifolia*, and making a semi-liquid paste, it should be rubbed on the body. Or, drenching a piece of cloth in some gruel of rice and then wringing off or pressing out the liquid, the patient's

In enlargement of the spleen, the treatment should consist of keeping the bowels clean. Treatment of spleen. Chebulic myrobalans reduced to fine powder and mixed with old treacle, or with *Vit* salt, each of equal measure, may be administered with warm water. By purging the bowels, this medicine proves very beneficial in enlargement of both the spleen and the liver. *Piper longum* is an efficacious remedy in this disease. Two or three of these fruits, reduced to paste with the aid of cold water, and administered by itself or with old treacle, operate beneficially on this disease. The flowers of the palmyra, kept within a covered pot and reduced to cinders, operate as a beneficial remedy in all cases of enlargement of the spleen, if administered in proper measure, after being mixed with old treacle. An equal measure of each of these, *vis.*, assafoetida, dry ginger, *Piper longum*, black pepper, *Applotaxis auriculata*, the ashes of the green spikes of barley, and rock salt, pounded with the juice of *Citrus medica*, makes an efficacious medicine for patients suffering under this disease. One-eighth of a tola to one-fourth is the measure. Equal measures should be taken of *Ptychotes Ajowan*, roots of *Plumbago Zeylanica*, the ashes of the green spikes of barley, roots of *Piper longum*, fruits of the same, and *Baliospermum montanum*. These should be reduced to powder. If half a tola be administered with warm water, or whey, or wine as the vehicle, beneficial results may be expected. The roots of *Plumbago Zeylanica*, should be reduced to a paste and divided into pills, each of the weight of one rati. Three pills should be given each inserted within a ripe plantain. The roots of *Plumbago Zeylanica*, turmeric, and ripe leaves of *Asclepias gigantea*, reduced to powder, or the flowers of *Grislea tomentosa*

reduced to powder and mixed with old treacle, may be given. Garlics, roots of *Piper longum*, and chebulic myrobalans, if eaten, and cow's urine, if drunk, does good in such cases. Half a tola of *Galaga purpurea*, reduced to paste, and administered with whey, does much good. Half a tola of the lime of conch-shells administered with the juice of *Citrus acida* can reduce the size of even a very much enlarged spleen. The lime of bivalve shells obtained from the ocean is a good remedy in this disease. The wood of *Cedrus deodara*, rock salt, and sulphur, taken in equal measures, and reduced to ashes, operate, beneficially in enlargements of the spleen and also of the liver. One-eighth tola of the fruits of *Piper longum* reduced to powder, and administered with the decoction of chebulic myrobalans and *Amoora Rohituka*, proves efficacious. The decoction of the barks of *Hedysarum gangeticum*, *Doodia lagopodioides*, *Solanum indicum*, *Solanum xanthocarpum*, *Tribulus terrestris* (syn. *T. langinosus*), chebulic myrobalans, and *Amoora Rohituka*, forms a good remedy. *Páchana* of the group beginning with *Nidigdhika* (*Tribulus terrestris*) may also be administered. Besides these, the remedies known by the names of *Mánakádi-gudiká*, *Vrihanmánakádi gudiká*, *Guda-pippali*, *Abhayálavan*, *Mahámrityunjaya Lauha*, *Vrihallokanátha Rasa*, and others, should with discretion be administered. If fever, with excited phlegm, be not present, such Ghritas as *Chitraka-ghrita* deserve to be administered. Another efficacious medicine in enlargement of spleen is *Rohitárishta*.

If violent fever accompanies, or if the fever that is Our Panchatikta pills. present suddenly gains in strength, then among the medicines mentioned above, those should be selected which are alleviative of fever also.

Those medicines, again which check and cure fever, should be administered in conjunction with the drugs that alleviate enlargement of the spleen. If necessary, the treatment of the spleen should be suspended temporarily for treating the fever. Our Panchatikta pills are very efficacious in fever with enlargement of spleen. After the fever has abated, the treatment of spleen should be taken up.

In advanced cases, purgatives should not be administered since, if these induce looseness of bowels and stomachic disorders, that undesirable condition can hardly be removed without great difficulty. If looseness of bowels be induced, such medicines as Vishamajwarántaka-lauha, which operate as inspissants, should be given. If there be dysentery, or dropsical swellings, or jaundice and anæmia, the medicines prescribable in these diseases should then be given along with those especially laid down for enlargements of the spleen. If with enlarged spleen the Grahani be disordered, the disease becomes exceedingly difficult of cure. The medicines prescribable in such cases are Chitrakádi-ghrita as also such medicated spirituous liquors as Kanakárishta, Abhayárishta, etc., as laid down in the chapter relating to diseases of the Grahani.

When sores appear in the mouth, pills made of the ingredients beginning with Khadira (Treatment when sores appear in the mouth. *Acacia catechu*) should, dissolving them in water, be applied to them. Mixing a little alum with the decoction of the barks of *Acacia Arabica*, *Mimusops Elengi*, *Eugenia Jambolana*, and *Diospyros glutinosa*, and the leaves of the guava, the liquid, while warm, may be given as a gargle. The patient by using this gargle six or seven times a day is sure to derive great benefit from it.

If there be pain in the spleen, or the parts about it,
 Treatment when pain a plaster may be applied of *Zingiber*
 accompanies enlarge- *cassumunar* reduced to a fine paste.
 ment of spleen.

Fomentation with warm water may also
 be had recourse to. A sheet of flannel may also be tied
 round, pressing the spleen slightly.

The regimen that has been laid down in cases of mature
 and chronic fever is prescribable in this
 Diet. disease. Those articles and practices should
 be avoided by patients suffering from enlarged spleen which
 have been directed to be avoided by persons suffering
 from mature fevers. Instead of giving ordinary milk, the
 the patient should have milk boiled with two or three fruits
 of *Piper longum*. Besides being food, milk boiled with
Piper longum operates as a medicine. Every kind of fried
 or burnt food, food that is heavy and takes long to digest,
 all articles that are possessed of keenness of energy, much
 labour, night-keeping, sleep during the day, and sexual con-
 gress should be avoided.

CHAPTER IV.

LIVER.

ALL those causes which lead to enlargement of the spleen and which have been laid down
Causes. in the previous chapter, produce enlargement and derangements of the liver also. Besides, excessive drink, the sudden stoppage of bloody discharges from piles, and a few other causes operating suddenly upon the system, lead to enlargement of the liver and other derangements in that important organ. The liver is not only enlarged. It is sometimes contracted. When the liver is in its natural state, it can rarely be felt by the fingers. If enlarged or contracted, the physician can detect it by pressing his fingers down upon that part of the body under which the liver is placed. When the liver is deranged, there is pain in it. The stools become scanty and their color becomes muddy. The whole body, especially the eyes, becomes pale. A sensation of contraction is felt under the ribs of the right side. A chronic cough becomes perceptible. Pain is felt below the right ribs like to what may be caused by numberless needles pricking the part. Pain is felt on the right shoulder, or the whole of the right side of the body. A bitter taste is always felt in the mouth. Nausea or actual vomiting appears. The pulse becomes hard. Fever is always present. Various other symptoms which appear in cases of enlarged spleen show themselves in this disease also. The patient, when

suffering under this disease, cannot lie down on the right side. The fault or faults excited should be determined in the same way as in disorders of the spleen. If disorders of the liver be not attended to for a long time, jaundice, anæmia, and dropsical swellings and diverse other diseases appear. If the liver, becoming very much enlarged, causes the stomach to be enlarged or inflated, it is called by a separate name, *viz.*, enlargement of the stomach. This disease will be noticed in the chapter on the diseases of the stomach.

The treatment is the same as in disorders of the spleen.

Treatment. The bowels should always be kept clean.

All the medicines laid down in the last chapter are prescribable in disorders of the liver. Besides those, the well-known preparations of iron called Yakridāri, Yakritplihāri, and Yakritplihodara-hara, and the following remedies, *viz.*, Vajra-khāra, Mahādrāvaka, and Mahāçankhadrāvaka, should, with discretion, be used. For allaying pain, the part above the liver should be rubbed with turpentine and then fomentation with warm water should be resorted to. Cow's urine, heated and bottled up, may also be used for fomentation. A piece of flannel also, soaked in heated cow's urine, may be used for the purpose.

The diet which is prescribable in this disease is the

Diet. same that has been laid down in diseases

of the spleen. The articles and prac-

tices that should be avoided are also the same.

CHAPTER V

FEVER WITH DIARRHŒA.

FEVER and diarrhœa are separate diseases. As sometimes, however, these occur together, and as the treatment that then becomes necessary is distinct from what is pursued in either of the diseases when it occurs separately, Hindu physicians regard fever with diarrhœa as deserving of especial notice. When those causes which produce fever exist with those others which produce diarrhœa, they lead to fever with diarrhœa. Besides, if one during fever takes such food as should be avoided, or such food as excites the bile, or drinks impure water, or breathes foul air, or uses powerful purgatives, diarrhœa is sure to supervene. In those fevers, again, in which the bile predominates, there is every probability of diarrhœa supervening.

It is practically impossible to combine the treatment of fever and that of diarrhœa in cases of fever with diarrhœa. Almost all the medicines prescribed for fever are more or less calculated to purge the bowels. The medicines prescribable in diarrhœa are all of an opposite character, being constipatives. It will be seen, therefore, that medicines that are alleviative of fever, increase the strength of diarrhœa, while those that alleviate diarrhœa serve to increase the violence of fever. Hence the treatment in fever with diarrhœa is

something different from that of fever as also that of diarrhœa. In this disease, no effort should be made at the outset for checking the watery motions. If the motions are checked, diverse other diseases may appear in consequence of the fœtid matter in the stomach and the bowels. In those cases, however, in which the frequency and quantity of the stools appear to be positively dangerous to the patient's life, medicines should be administered for checking them, regardless of the fever. Ordinarily, in this disease, Pâchanas and such medicines as provoke the digestive fire should be administered. One tola of coriander seeds and one tola of dry ginger should be boiled in 32 tolas of water. When about 8 tolas remain in the pot, it should be strained. This drink should be given twice or thrice a day after being cooled. The following decoctions also may be given, viz., that of the group beginning with *Pavonia odorata*, or of the group beginning with *Cissampelos hernandifolia*, or of the group beginning with *Cyperus partenuis*, or of that beginning with *Tinospora codifolia*, or of that beginning with *Andropogon muricatum*, or of the five roots, or of that beginning with *Halarrhena antidysenterica*, or of that beginning with *Cyperus rotundus*, or of that beginning with *Ghana*, or of the group of five beginning with *Ægle marmelos*. Discretion should be used in selecting the particular decoction. If these decoctions do not allay the disease, the physician should, after selecting the vehicle with discrimination, administer any of these, viz., *Vyashadi-churna*, *Kalingadi-gudika*, *Madhyama-Gangadhara-churna*, *Vrihat Kutajavaleha*, *Mritasanjibani* pills, *Siddhaprâneswara-rasa*, *Kanakasundara-rasa*, *Gagasundara-rasa*, *Anandabhairava-rasa*, *Mritasanjibana-rasa*, and medicines of a similar character.

If the patient's strength is not exhausted, he should at

Diet.

the outset be made to fast.* A little

while after, taking the group of six be-

- ginning with *Nymphæa stellata*, cook it in gruel of barley, and then mixing with it a little juice of the pomegranate, the mixture should be given as drink ; or, the *manda* of fried paddy, or of barley, or the *pálo* of the fruits of *Trapa bispinosa*, or gruels of arrow-root and barley, may be given.* At this stage the food we have prepared and which is known by the name of Sanjibana-Khādyā, becomes highly beneficial. If the patient becomes weak, he should not be made to fast. From the outset he should be given light diet of the kind indicated. As the disease decreases in strength and the digestive power of the patient increases, old rice of the finer varieties, properly boiled, juice of *Cicer lens*, and curries made of brinjals or the smaller variety of Udumvara, may be given. Among fishes, those called Māgura and Singhi and Koi, and generally all the smaller varieties, may be given. Of course, it is the juice of these that is recommended, carefully prepared with as little of curry powders as possible. In particular cases, the juice of light and delicate varieties of meat, goat's milk, the juice of pomegranates, and the burnt kernel of raw fruits of the *Ægle marmelos*, may be given. For drink, water should be given, cooled after being properly boiled.

* The *Manda* of any article is prepared by first soaking it in water. After sometime, the article is dissolved into the water by continuous pressure of the hands and fingers. The somewhat thick liquid is then strained through a piece of cloth. That which falls through the cloth is taken as *Manda*.

Pálo is prepared in a different way. The article is thrown into water. After sometime, its substance is separated from the bark or husk or other unsubstantial parts. The substance is then subjected to certain cleaning processes for obtaining the *Pálo*.

All food that is heavy and that takes long to digest, or that is keen in energy, wheat-flour, Things and prac- barley, the following varieties of pulses, tices forbidden. *Phaseolus radiatus*, gram, and *Cajanus indicus*, the ordinary pot-herbs, sugar-cane, raw-sugar, dried grapes, all articles that are laxative, salt in copious measure, chillies, copious drafts of water or other drinks, as also cold, sunshine, the heat of fire, the rubbing of oil on the body, baths, physical exercises, night-keeping and sexual congress, are forbidden.

CHAPTER VI.

DIARRHŒA.

That disease in which the faults, *vis.*, wind, bile, and phlegm, and the *dhatu*s or chief ingredients of the body, *vis.*, juices, blood, flesh, adeps, urine, etc., being all more or less vitiated, weaken the digestive fire and are themselves forced out of the body with the stools by the action of the wind, is called Diarrhœa.

All food that is difficult of digestion, or that is very
Causes. oily, or very dry, or very hot, or very cool, or very watery, or very hard, or that is composed of hostile or inharmonious ingredients such as milk and meat or fish, eating before the food last taken has been digested, food that is not properly cooked, irregular eating, that is, eating too much one day and too little another day, or eating at irregular intervals, eating a particular kind of food in excess, excessive, or injudicious, or insufficient use of emetics and purgatives and enemata, vegetable or mineral poison eaten or drunk, vitiated wine or water taken copiously, indulgence in food and practices that are injurious and to which, besides, one is not accustomed, irregularities of season, panic, grief, remaining in water for a long time, suppression of the urgings of urine and stools, and worms in the stomach, are some of the causes that lead to attacks of diarrhœa.

Diarrhœa is generally regarded as of six varieties, *vis.*
 Varieties. 1. born of vitiated wind; 2. of vitiated

bile; 3. of vitiated phlegm; 4. of all the faults vitiated; 5. of grief, and 6. of the juice of uncooked or raw food. Those varieties which are induced by the vitiation of two of the faults present the symptoms, in a combined state, of each of those two faults. Hence, they do not deserve to be regarded separately.

Before the symptoms are fully developed of diarrhœa, pain is felt in the cardiac region, the
 Premonitory symptoms. region about the navel, the anus, the stomach, and the two sides of the abdomen. One feels as if one is being incessantly pricked with a hundred needles in these regions. A general langour of the body is also felt. The wind does not move freely. The bowels become constipated. Indigestion is another premonitory symptom that is certain to appear.

In diarrhœa brought about by vitiation of wind, the stools are scanty and frequent, of
 Symptoms of diarrhœa caused by vitiated wind. the colour of blood or dark, and mixed with froth. They are dry and contain indigested matter. The passing of stools is accompanied by sound. There is pain in the mouth of the anus.

In diarrhœa caused by vitiated bile, the stools are either yellow, or green, or red. The other
 Symptoms of diarrhœa caused by vitiated bile. indications are thirst, swoons, burning sensation all over the body, burning pain in the mouth of the anus, and the appearance of sores also in that part.

In diarrhœa caused by vitiated phlegm, the stools are white in colour; thicker than in the
 Symptoms of diarrhœa caused by vitiated phlegm. other varieties; mixed with phlegmatic secretions; possessed of the scent of raw and undigested food. They are cool to the touch. The hairs on the patient's body frequently stand erect.

In diarrhœa caused by the vitiation of all the faults, the indications are observable of each
 Symptoms of diarrhœa caused by all the three faults being vitiated. of the separate varieties. The stools look like porcine fat and sometimes like water in which meat has been washed. This disease is very difficult of cure.

If one, in consequence of some dire calamity, becomes filled with grief, and as a result begins
 Symptoms of diarrhœa caused by grief. to eat very sparingly, the heat and vapours caused by grief, entering the stomach, weaken the digestive fire and throw the blood out of its proper course. This induces diarrhœa. In this variety, blood as red as the fruits of *Abrus precatorius* comes out, sometimes mixed with stools and sometimes unmixed with any other matter. When mixed with stools, such blood is possessed of a very fœtid scent; but when it is unmixed with stools, it is almost scentless. Unless the grief which lies at the root of the disease be conquered, the disease itself cannot be cured.

In consequence of the inability to digest the food taken, the three faults fall away from
 Symptoms of diarrhœa caused by indigested juices. their respective paths and vitiate the blood and other ingredients of the body. The result is that the patient frequently passes stools of different colours. In this kind

of diarrhœa, biting pains are constantly felt in the stomach.

As long as the stools are greasy and of a very foetid scent and sink when thrown into water, the diarrhœa is called *Amatisara*, i. e., immature, or that caused by undigested juices. When the stools lose their foetid scent as also their slippery or lardaceous quality, and when they float on water instead of sinking down to the bottom, the diarrhœa is regarded mature. In this stage, both the stomach and the body become lighter than before.

If in any variety of diarrhœa the stools become oily and dark in colour, or black and red like a piece cut off from the liver, or if they become shining and transparent and resemble either ghee, or oil, or fat, or marrow, or a piece of boneless flesh, or milk, or curds, or water in which flesh has been washed, or if they become blue and red like the wings of the Chāsa (the blue jay), or slightly dark and burnt in colour, or glossy, or of various colours, or if the stools show on their surface circular spots of diverse hues like what may be seen on the plumes of the peacock, or if they emit a foetid odor like that of carrion, or if they look like a quantity of cerebral matter, or if they become copious in quantity, death very generally ensues. That diarrhœa which is characterised by thirst and burning sensation all over the body, in which the patient sees darkness in broad daylight, in which there is difficulty of breathing as in asthma, or hiccup, or sharp, shooting pains on the sides of the chest or in the bones, or fainting fits and loss of consciousness, or restlessness of the mind, or in which the patient's piles (if he has them) suppurate and throw out puss, or

in which there is delirium, is regarded by physicians as incurable. That diarrhœa in which mouth of the anus remains open and never shuts, or in which the patient loses strength and flesh, or in which the patient's body remains cool notwithstanding the inflammation and sup-puration of the anal canal, also proves incurable. If these symptoms manifest themselves, recovery cannot be expected of the patient, whatever the patient's age or sex.

Besides these, there is another form of diarrhœa in which bloody stools are frequently passed in copious measures. If a patient, while suffering from diarrhœa born of vitiated bile or while such diarrhœa is about to attack him, largely indulges in food that generates bile, he is certain to get diarrhœa with bloody stools. In this disease, blood is passed in copious quantities, sometimes mixed with stools and sometimes unmixed with any matter. In other forms of diarrhœa, when they become mature, drops of blood may sometimes be seen mixed with stools. These, however, are to be distinguished from diarrhœa with bloody stools.

The patient, when diarrhœa is completely cured, suc-
ceeds in passing urine or wind with-
out the stools coming out at such times.
The digestive fire also increases and the sensation of heaviness in the stomach disappears.

In no form of diarrhœa during the immature state, should astringent drugs of any kind be administered. If administered at such a stage, the medicines operate most injuriously. By stopping the escape of the vitiated faults,

they induce dropsical swellings, anæmia and jaundice, enlargement of the spleen, leprosy, abdominal tumours, fever, rigid spasms, tympanites, flatulence, inflammation and ulceration of the *Grahani*, piles, and various other diseases. Hence the treatment is separate of immature diarrhœa. It should be noted, however, that in those cases of even immature diarrhœa in which the stools are watery and very copious, and in which the strength of the patient gradually decreases, astringent medicines may be prescribed. In the case of infants and old men, as also of those who are very weak, such medicines should be administered even in the immature stage.

In the immature stage of diarrhœa, for alleviating the pains caused by the undigested food in the stomach, for preventing the fæcal matter in the intestinal canals from becoming obstructed, for the digestion of the faults and improvement of the digestive fire, the decoction is prescribed of these five, *vis.*, coriander seeds, dried ginger, the tubers of *Cyperus rotundus*, the roots of *Pavonia odorata*, and dried Bel. In bilious diarrhœa the decoction should be given of four of the above, leaving dried ginger out. If there be pain in the stomach, accompanied by thirst, the decoction is prescribable of dried ginger, the tubers of *Cyperus rotundus*, and the tuberous roots of *Aconitum heterophyllum*. The decoction may also be given of these two only, *vis.*, coriander seeds and dried ginger. The decoctions are capable of digesting the undigested faults and exciting the digestive fire. If, again, at such a stage a few scybalæ begin to come out and if there be biting pain in the stomach, then *Chebulic myrobalans* and *Piper longum* may be prescribed.

Both these should be reduced to a paste with the aid of cold water, and the paste should then be heated a little. Being a purgative, the measure should be regulated by observing the number of motions and the quantity of stools passed by the patient. There are other medicines which are known to alleviate diarrhœa in its acute stages. Reduce each of the following to powder, *viz.*, the roots of *Cissampelos hernandifolia*, Assafœtida, the seeds of *Cnidium diffusum*, the fruits of *Acorus calamus*, the fruits of *Piper longum*, the roots of the same, the fruits of *Piper chaba*, the roots of *Plumbago zeylanica*, dried ginger, and rock salt. Take equal measures of each of these and mix them together. One-sixteenth tola of the compound, dissolved in water, should be given to the patient. The pulv of the group beginning with dried ginger, as also of chebulic myrobalans, administered in the same measure, *viz.*, one-sixteenth of a tola, dissolved in water, is very beneficial. There is another preparation which is highly spoken of. Take 20 tubers of *Cyperus rotundus*, of the ordinary size. Take goat's milk measuring eight times the weight of the former. Add water that is four times the measure of goat's milk. Boil all these together and take down the pot when the liquid that remains is of the measure of the milk. Strain it through a new cloth. This milk given to the patient alleviates pain and cures the disease. The *pâchana* made out of the group beginning with *Piper longum*, or of that beginning with *Holarhena antidysenterica*, or of that beginning with *Ptychotis Ajowan*, or of that beginning with the three *ushanas*, *i. e.*, dry ginger, long pepper, and black hepper, is also beneficial at this stage.

When the immature or acute stage of diarrhœa has passed away and the symptoms of maturity have appeared, the treatment should accord with the particular fault or faults excited in the patient. In diarrhœa brought about by vitiated wind, the infusion of the drugs beginning with *Basella rubra*, or of those beginning with chebolic myrobalans, or of those beginning with *Acorus Calamus*, should be given. In diarrhœa caused by vitiated bile, the *pâchana* may be given of the group beginning with liquorice, or of that beginning with *Egle marmelos*, or of that beginning with *Myrica sapida*, or of that beginning with (the aquatic potherb called) Kanchata, or of that beginning with *Agathotes cherayta*, or of that beginning with *Aconitum heterophyllum*. In diarrhœa caused by vitiated phlegm, the *pâchana* may be given of the group beginning with chebolic myrobalans, or of that beginning with (Krimiçatra, otherwise called Vidanga) *Embelia Ribes*, or of that beginning with *Piper Chaba*. The pulv may also be given of the drugs beginning with *Cissampelos hernandifolia*, or of those beginning with *Ferula Assafetida*, or of those beginning with *Acacia Arabica*, or of those beginning with chebolic myrobalans. In diarrhœa caused by the vitiation of all the faults, the infusion should be prescribed of the drugs beginning with (Samangâ) *Sida cordifolia*, or of the five roots beginning with that of *Sida cordifolia*. In diarrhœa caused by grief and fear, the treatment should be similar, to that of diarrhœa caused by grief. In diarrhœa caused by excited bile and phlegm, decoction of the group of drugs beginning with *Cyperus rotundus*, as well as of the group beginning with *Sida cordifolia*, and also of the group beginning with *Echites antidyserterica*, ought to be prescribed.

In diarrhœa caused by excited wind and phlegm, *paçhana* of the group beginning with *Plumbago zeylanica*, and in diarrhœa caused by excited wind and bile paste of the group beginning with *kulinga* (a variety *Echites antidysenterica*), are to be administered.

In diarrhœa with blood, if there be pain in the abdomen caused by indigestion or constipation of the bowels, the bark of the roots of *Archyranthes triandra*, of *Zizyphus jujuba*, of *Eugenia Jumbolana*, of *Buchanania latifolia*, and of *Mangifera Indica* or of *Pentaptera Arjuna*, grinded on a curry stone and mixed with milk and honey, is to be prescribed. The patient is to have two tolas of burnt fruits of *Ægle marmelos* mixed with treacle to eat. Take the rind of the unripe fruit of *Nauclea Cadamba* and the bark of *Echites antidysenterica*, each one tola in weight; boil them in thirtytwo tolas of water; when the water is reduced to eight tolas, have the decoction strained. Mix it with honey weighing one eighth of a tola, and give it to the patient. The leaves of *Mangifera indica*, *Eugenia jambolana*, and Emblic myrobalans, thrashed together, and mixed with two tolas of honey and a little quantity of goat's milk, are also a valuable medicine. The root of *Amaranthus spinosus*, rendered into a paste with two tolas of water in which rice has been washed, may be administered, mixed with sugar and honey. The black variety of *Sesamam indicum*, grinded on a curry stone, and mixed with sugar one fourth of its own weight, may be given with goat's milk, to the patient. The hanging roots of the banian, grinded with water in which rice has been washed, are highly efficacious when administered with whey. Decoction of the leaves of *Ayápana* or of *Bumea lacera* may be used with effect. The most efficacious drug in all sorts of diarrhœa,

including that with blood, is the decoction of the bark of *Holarrhena antidysenterica*, boiled and mixed with powdered *Aconitum heterophyllum* till it has become thick. Another successful medicine is the decoction of the bark of *Holarrhena antidysenterica* mixed with that of the bark of *Nauclea Cadamba*. One tola of this forms a dose. To prepare the above, take eight tolas of each of these barks separately; boil each in sixty four tolas of water; strain when the water is reduced to one-fourth of its weight, and then mix the two, The mixture should be administered with whey.

If the pain in the rectum be intense, take opium of the weight of four ratis, *Acacia catechu*, four ratis, and Treatment of pain in the rectum. wheat-flour, eight ratis; mix them with clarified butter, and making a few sticks thereof, insert one every two hours into the rectum. Pain may also be alleviated by applying heat to the rectum with *Gendi* fried in clarified butter.*

In all sorts of diarrhœa in maturity, i. e., in the stage Treatment of the disease in its maturity. immediately before cure, when the undigested food in the stomach has been digested, pains have been alleviated, the digestive power excited, and the stools passed are of diverse colours, *pachana* of the group beginning with *Holarrhena antidysenterica*, or, the *putapdka* preparation of *Holarrhena antidysenterica*, or the *leha* (extract) of the same, or the eight articles beginning with *Holarrhena antidysenterica*, or the *Ghee*, known as *Sadanga* (made up of six articles), or such other medicine, should be prescribed. Much benefit may be had if the bark of *Holarrhena antidysenterica*, the tubers of *Cyperus*

* A small variety of moluska.

rotundus, dry ginger, dried fruits of the *Ægle marmelos*, gum Arabic, fried borax, *Acacia Catechu*, and the gum of *Bombax Malabaricum*, known as *mocharasa*, each of the weight of a tola, powdered and mixed together with half a tola of opium, be used with one tola of the decoction of *Ayápána* or a little cold water, thrice a day.

In severe varieties of diarrhœa, for checking frequent and excessive motions apply around the navel a plaster of emblic myrobalans reduced to paste with the aid of water, and fill the empty space over the navel itself with the juice of ginger unmixed with water. The tendency for copious purging, and pain of every kind, are sure to abate. A plaster of *Myristica officinalis*, or of the bark of *Mangifera Indica* grinded with *Kanji* (fermented gruel of paddy) is equally efficacious. Five *ratis* of the pulv of *Māju* fruits, one-fourth *rati* of opium, and five *ratis* of powdered gum Arabic, mixed together, may be administered with a little quantity of water, after each motion. When the purging has been checked, the above medicine should be given only once a day. If there be vomiting, *pāchanas* of the group beginning with *Ægle marmelos* and of the group beginning with *Trichosanthes dioica*, are to be prescribed. If there be vomiting, thirst, and fever, *pāchana* of the group beginning with *Agalaia Roxburghiana*, or with *Eugenia jambolana*, or with *Pavonia odorata*, or that of the dried ten roots, or any other *pāchana* of the kind, may be used. If there be pain in the rectum, the part should be fomented with the hot water in which leaves of *Trichosanthes dioica* have been boiled with *Glycyrrhiza glabra*, or with hot goat's milk. A plaster of the leaves of *Tricho*

santhes dioica and *Glycyrrhiza glabra*, grinded with honey and goat-milk, may also be used.

In all varieties of diarrhœa mentioned above, selecting the medium or vehicle, according to the character of the disease and the strength of the patient, the powder known as *Nāṛāyana*, or *Atisdravāranarasa*, or the pills made of the group beginning with *Glycyrrhiza glabra*, or *Prāṇeswararasa*, or *Amrildr̥nava*, or *Bhuvaneswara*, or *Jatiphalarasa*, or *Abhayānṛisingha*, or *Anandabhairava*, or *Karpurarasa*, or *Kutajārīṣṭa*, or *Ahiphendṣava*, or other medicines of the kind, may be used. Besides these, some other medicines, which are used in diseases of the *Grahani*, may also be prescribed.

In the acute stage of diarrhœa, fast is preferred. Weak patients, however, should have light-food to eat. Fried paddy, reduced to powder, the sediment of *Trapa bispiuosa*, the thick gruel of rice or of barley, constitute diet that is exceedingly light. Sago and arrow-root serve the same purpose. A more beneficial diet is the thick gruel of rice, barley, etc., boiled with particular medicines. The gruel of rice, barley, &c., with decoctions of *Hedysarum gangeticum*, *Doodia lagopodioides*, *Solanum indicum*, *Solanum jacquinii*, *Sida cordifolia*, *Tribulus terrestris*, dried fruits of *Ægle marmelos*, *Cissampelos hernandifolia*, dried ginger, and *Coriandrum sativum*, may be prescribed as diet in all varieties of diarrhœa. In diarrhœa caused by excited bile and phlegm, the thick gruel of rice, barley, etc., should be given with decoctions of *Hedysarum gangeticum*, *Doodia lagopodioides*, *Sida cordifolia* and dry fruits of *Ægle marmelos*. In diarrhœa caused by excited wind and phlegm, the thick gruel of the same should

be given with decoctions of *Cordiandrum sativum*, dry ginger, the tubers of *Cyperus rotundus*, *Pavonia odorata* and dry fruits of *Ægle marmelos*, or with decoctions of *Cordiandrum sativum* and dry ginger. In diarrhœa caused by excited wind and bile, the gruel is to be given with decoctions of the roots of *Ægle marmelos*, *Bignonia indica*, *Gmelina arborea*, *Bignonia suaveolens*, and *Premna spinosa*. In diarrhœa caused by excited phlegm, the gruel is to be given with decoctions of *Piper longum*, the roots of *Piper longum*, *Piper chaba*, the roots of *Plumbago zeylanica*, and dry ginger. Boiled water rendered cool is to be given for drink. If there be exceeding thirst and the patient often calls for drink, water in which *Coriandrum sativum* and *Pavonia odorata* have been boiled, should be given. It is sure to cure thirst, and the burning sensation of the body, and relieve the patient in no time. This drink exercises a beneficial effect on diarrhœa.

In the ripe stage of diarrhœa, old *Sali* rice,* the juice of *Cicer lens*, curries of *Trichosanthes dioica*, brinjals, the smaller variety of *Ficus glomerata*, raw plantains of the species called *Thote*, and leaves of *Pæderia fœtida*, liquid curries of such fishes as *Kai*, *Sinhi*, *Mâgur*, *Maurala*, are prescribed as beneficial diet. Milk is to be given, boiled with lime water or with some medicine laid down for diarrhœa. In mature diarrhœa, only milk is beneficial. In diarrhœa with bloody stools, goat's milk is to be used for that of cows. The fruits of

* *Sali* is one of the three principal classes of rice. It is reaped in the cold season. The other varieties are *Vrihi* reaped in the rainy season and *Sashthika* grown in the hot season. *Sali* is also known by the name of *Haimantika*.

Ægle marmelos, burnt in fire, or slices of the fruit boiled in sugar, fruits of *Punica granatum*, tubers of *Scirpus kysoor*, and fruits of *Trapa bispinosa*, should be given to eat in maturè diarrhœa. What has been forbidden in diarrhœa with fever, is forbidden also in ordinary diarrhœa. But if the patient be not weak, he may have a bath in tepid water every two or three days.

CHAPTER VII.

DYSENTERY.

Dysentery is due to such causes as exposure to
to impure, chill, and moist air, resi-
Causes. dence in damp places, drinking of
impure water, use of such heavy food as excites the wind,
over-feeding, excessive labour, and excessive indulgence
in liquor. In this disease the excited wind causes frequent
phlegmatic evacuations. At the commencement are seen
exceedingly foetid and sticky motions mixed with mucus.

Blood appears in the stools at a later period. Fever, loss
Symptoms. of appetite, and excess of thirst, griping
pain in the abdomen, painful micturi-
tion, vomiting, and nausea also appear. The tongue becomes
dirty and dry, the urine scanty and high coloured, and the
face pale and anxious. Sometimes the tongue assumes a
red, ashy, or black colour, and the pulse becomes quick and
weak. During evacuations there is much straining. *Praba-*
hana means straining. Hence the disease is called *Prabahika*.

Wind, bile or phlegm, excited by this or that kind
of food, vitiates the blood and causes
Indications of the parti- this disease. The use of oily food pro-
cular fault excited. duces dysentery by exciting the phlegm.

The use of dry food leads to dysentery by exciting the

wind. The use of food possessed of keen virtues (e. g., chillies) causes dysentery by exciting the bile and vitiating the blood. In dysentery caused by excited wind, gnawing pain in the stomach and intestines is the chief symptom. In dysentery caused by excited bile, a keen, burning sensation is felt in the body and specially in the rectum. In dysentery caused by excited phlegm, mucous stools become frequent. In dysentery caused by vitiated blood, sanguinous stools are seen. In the acute stage of the disease, symptoms of diarrhoea appear. The acute and the advanced stages of the disease are determined by the symptoms already laid down of the acute and advanced stages of diarrhoea.

Upon the whole, the treatment is the same as that of diarrhoea. The *pāchanas* and the drugs
 Treatment. prescribed in diarrhoea are to be used considerably in this disease. Besides these the following medicines may be prescribed :

Two to four annas in weight of the roots of a tamarind seedling not more than one year old, are to be grinded with whey. This should be administered thrice or four times a day.

The juice of the above herb.

Tender leaves of the tamarind tree, of the weight of two tolas, and *Oxalis corniculata*, two tolas in weight, boiled in thirtytwo tolas of water, till it is reduced to 8 tolas. The decoction is to be strained and given to the patient to drink.

The juice of raw fruits of *Punica granatum*.

The juice of the leaves of the same.

The juice of *Ayápana*.

The juice of *Commelina bengalensis*.

The juice of the plant known as *Kalakarpur*.

The juice of the bark of *Holarrhena antidysenterica*.

At the first stage of the disease, however, the bark of *Holarrhena antidysenterica* ought not to be used.

Piper longum powdered, half a tola in weight, with one eighth of a seer of goat's milk, is sure to cure even obstinate cases of dysentery.

Piper nigrum, powdered, a quarter of a tola in weight, may be used for powdered *piper longum*.

The kernel of the raw fruits of *Ægle marmelos* burnt in a slow fire, reft of rind, and mixed in equal quantities, with curds, are to be used.

The kernel of raw fruits of the *Ægle marmelos*, burnt in fire, two tolas in weight, treacle of sugar-cane, one tola in weight, powdered *Piper longum*, and powdered dry ginger, four annas in weight, mixed with a little quantity of sesame oil, constitute a good medicine.

The bark of the roots of *Asclepias gigantea* reduced to powder, five or six ratis in weight, is also beneficial.

The bark of *Holarrhena antidysenterica* seeds of the same, tubers of *Cyperus rotundus*, the roots of *Padonia odorata*, the gum of *Bombax malabaricum*, dry fruits of *Ægle marmelos*, the tuberous roots of *Aconoum heterophyllum*, the rind of the fruits of *Punica granatum*, each of four annas weight, boiled in thirtytwo tolas of water and strained when the water is reduced to eight tolas are sure to give relief.

At the commencement of the disease half a chatak of castor oil, ten drops of opium solution, mixed with a

chatak of water, are to be given every day to the patient.

At a later stage, powdered dry ginger, two ratis in weight, powdered bark of *Holarrhena antidysenterica*, eight ratis in weight, powdered gum Arabic, four ratis in weight, and opium half a rati, mixed together, are to be used thrice a day.

The white variety of the exudation of *Shorea robusta* reduced to powder, and sugar mixed together in equal quantities are sure to check the disease. The measure should be two annas in weight.

For alleviating cramps in the abdomen, turpentine oil is to be rubbed on it.

Take two tolas of the leaves of *Trophis aspera*, two young plantains of the species known as *Kantali* (cut into pieces), two tolas of rice of the variety called *Atapa* and a quarter of a seer of water. Grind them together in a stone mortar. Strain the product. Place a fourth part of the liquid in a brass pot; heat it until half of it evaporates. This is a good medicine. Such a dose is to be used every three hours to alleviate cramps in the abdomen.

Other medicines of diarrhoea, and of the disease of the intestine known as *Grahani*, may be administered with discretion, considering the state of the disease and the patient.

The diet should be the same as in diarrhoea. In
 Diet. chronic dysentery without fever, curds
 of buffalo-milk, or whey, may be used
 with great benefit.

CHAPTER VIII.

DISEASE OF THE INTESTINE KNOWN AS GRAHANI.

After diarrhoea abates, and before the power of digestion is awake, if any improper diet be resorted to, the digestive power becomes more enfeebled. The intestine, *Grahani*, is weakened. Loss of appetite supervenes and all the three faults are excited. The *Grahani* is vitiated. In this stage, sometimes, undigested food comes out frequently from the stomach. Sometimes the stools consist of digested food. The evacuations are of an exceedingly foetid odor. Sometimes constipation appears. At every hour pain in the stomach is felt. This disease is called *Grahani* because it has its source in the vitiation of the intestine known as *Grahani*. It may supervene dysentery or may appear without dysentery.

Before the appearance of the disease, thirst, langour, weakness, and heaviness of the body, *Premonitory symptoms.* show themselves. Besides, every kind of food taken produces either acidity or is digested slowly.

Wind is excited by food which is exceedingly pungent, or bitter, or astringent, or dry, or is *Grahani* born of vitiated wind. baneful in consequence of inharmonious ingredients, or is exceedingly scanty. Fast, long walk, suppression of the urgings of urine

and self-indulgence in excess, and similar practices, vitiate the wind. Thus vitiated it gives rise to *Vataja Grahani* (Grahani caused by excited wind). In this sort of Grahani the food taken is digested with great difficulty and results in acidity. The body becomes dry ; the face and the throat seem parched. Loss of appetite, of thirst, and of power of vision are seen. Synchronism, and pain on both sides of the chest, and thighs, and neck, supervene. Vomiting and purging occur together. Watery, frothy, and noisy stools are evacuated with difficulty either frequently or at intervals. Sometimes the evacuations are hard and dry. There is pain in the heart. The whole body becomes emaciated and weak. The mouth becomes tasteless, and the spirits low. Cough and hard breath also present themselves. While the food is being digested or has been digested, flatulence of the stomach appears. A sensation of relief comes to the patient immediately after eating. Moreover, the patient suspects that he has been attacked by the disease known as *Gulma*, or disease of the chest, or enlargement of the spleen.

Bile is excited by food which is sour, saltish, pungent, or unripe, or which produces acidity when taken, or which is of keen and heating virtues. The digestive fire is then extinguished and Grahani caused by vitiated bile sets in. Eructations, at once sour and foetid, appear. A burning sensation is felt in the heart and the throat. Disgust for food, thirst and watery evacuations of a blue or yellow colour follow. The whole body of the patient becomes yellow.

Phlegm is excited by food which is heavy and which, therefore, takes much time to digest ; or which is oily, or cold, or slimy, and sweet. Excessive eating, or sleep at day time just

after dinner, excites phlegm which soon weakens the digestive fire and causes *Grahani*. In it the food is slowly digested with great difficulty. The mouth is constantly filled with saliva. A taste of sweetness is ever present in the mouth. The heart seems to be filled with a thick liquid mass. Weakness, idleness, langour, nausea, vomiting, disgust for food, spitting of sputa and cough appear. The bowels seem to be stupified and heavy. Sweet eructations supervene. Disgust is felt for food and sexual intercourse. The evacuations become mucous, loose, and mixed with phlegm. *Ozoeana* sometimes supervenes.

If such food and drink and practices as are likely to excite all the three faults be indulged in, *Grahani* caused by excited wind, phlegm and bile, and if in consequence all of them be vitiated, a severe form of *Grahani* sets in. The symptoms of each separate variety of *Grahani* appear in this in a state of union.

Besides these, there is another variety of the disease which is known as *Sangraha-Grahani*. *Sangraha Grahani*.

In it the stools are cold, oily, sudden, and copious. They are sometimes watery and sometimes thick. There is noise during evacuations and slight pain also in the abdomen and waist. Such symptoms as rumbling noise in the stomach, distaste for exertion, weakness and prostration of limbs, also supervene. The disease waxes at day time in intensity and wanes during the night. Indigested food and vitiated wind are the principal causes of this disease. Both the diagnosis and prognosis are difficult.

As in diarrhoea, in the diseases of the *Grahani* also, symptoms of maturity and immaturity should be carefully

marked by the physician. *Grahani* proves fatal to patients of advanced years.

As in diarrhœa, in the immature stage of *Grahani* drugs should be administered, that are not constipative but digestive. By administering drugs of the former kind disease becomes aggravated. The following medicines may be given with benefit.

The decoctions of dry ginger, *Cyperus rotundus*, *Aconitum heterophyllum*, and *Tinospora cordifolium* mixed together, digest all faults of indigested food, and excite the power of digestion.

The decoctions of *Coriandrum sativum*, *Aconitum heterophyllum*, *Pavonia odorata*, *Ptychotis ajowan*, *Cyperus rotundus*, dry ginger, dried fruits of *Ægle marmelos*, *Hedysarum gangeticum*, *Doodia lagopodioides*, *Sida cordifolia*, are equally efficacious for the same purpose.

The medicine named *Chitragnadika* is also prescribed in the immature stage.

The symptoms of maturity of the disease may be gathered

Treatment according to the particular fault excited.	from those laid down of diarrhœa in its maturity. The strength of the particular fault excited should always be considered before a medicine is selected for administration.
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Treatment of <i>Grahani</i> caused by vitiated bile.	Generally, astringents beginning with <i>Hedysarum gangeticum</i> are beneficial in <i>Grahani</i> caused by vitiated wind.
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The astringents known as *Tiktâdi* are beneficial in

Treatment of <i>Grahani</i> caused by vitiated bile.	<i>Grahani</i> caused by vitiated bile. Paste (kalka) of articles beginning with <i>Ægle marmelos</i> , or the powder known as <i>Nâgarâdi</i> or that known as <i>Rasâñjanâdi</i> , may be used with beneficial results.
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The astringents known as *Cháturbhadra*, or powder of the drugs beginning with *Circuma*
 Treatment of *Gra-* of the drugs beginning with *serumbet*, powders of the drugs be-
hani caused by viti- *serumbet*, powders of the drugs be-
 ated phlegm. ginning with *Vanda Roxburghii*,
 powder of the drugs beginning with the roots of *Piper longum*, are often efficacious.

The preparation known as *Mundadigudika* is an excellent
 Treatment of *Gra-* medicine of *Grahani* caused by vitiated
hani caused by vitiated wind and bile. It does great good to
 wind and bile. patients, and promptly alleviates pain.

Powders of camphor and other drugs known as
 Of *Grahani* caused by 'Karpurádichurna' and pills made of
 vitiated wind and phlegm. *Tádisapatra*, *Pinus webbiana*, etc.,
 known as 'Tálisádivati' are very efficacious in *Grahani* caused
 by vitiated wind and phlegm. As an alternative, the
 extract of *Halarrhena antidyserterica* may be administered,
 using honey and the expressed juice of *Oldenlandia biflora*, as the medium. Also *Ferula assafetida*, *Cuminum cyminum*, dry ginger, *Piper longum*, and *Piper nigrum*, reduced to powder, and mixed together, may be prescribed, with whey as the medium. The measure recommended is two annas weight.

The mixture known as *Mushalyádi* should be pres-
 Of *Grahani* caused by cribed in *Grahani* caused by vitiated
 vitiated bile and phlegm. bile and phlegm. It has been seen to
 do much good to the patient.

Besides these, in *Grahani* caused by the vitiation of one, or two, or three faults, or in that variety of the disease which is called *Sangraha-Grahani*, such medicines as *Sreephaládi-kalka*, *Pancha-pallava*, *Nágarádyachurna*, *Bhunimvadyachurna*, *Páthádyachurna*, *Swalpa-gangádharachurna*, *Vrihat-gangádharachurna*, *Swalpalavan-*

gādichurna, *Vrihat-lavangādichurna*, *Nāyikāchurna*, *Jatiphaldīchurna*, *Jirakādichurna*, *Kapitthashtakachurna*, *Dddimbāshtakachurna*, *Ajājyādichurna*, *Kanchatāvaleha*, *Dasamulaguda*, *Mustakādyamodaka*, *Kāmeswaramodaka*, *Madanamodaka*, *Jirakadimodaka*, *Vrihat-jirakadimodaka*, *Methimodakā*, *Vrihat-methimodaka*, *Agnikumaramodaka*, *Grahanikapātrasa*, *Sangrahagrahanikapātrasa*, *Grahanisārdulavatika*, *Grahanigajendravatika*, *Agnikumārasa*, *Jatiphaldīdyavatika*, *Mahāgandhaka*, *Mahābhkrvatika*, *Piyushavallirasa*, *Srinripativallabha*, *Vrihatnripativallabha*, *Grahanivajrakapāta*, *Rājavalabharasa*, and others may be prescribed, considering the condition of the patient, the circumstances of the disease, and the strength of the special fault vitiated.

In chronic cases, such medicated ghees as *Chāngeri-ghrita*, *Marichādyaghrita*, *Mahāshatapalākaghrita*, may be given to the patient to eat, and such medicated oils as *Vilvataila*, *Grahani-mihirataila*, *Vrihat-grahanimihirataila*, and *Dddimbadyataila*, should be used for rubbing the body with. The rubbing often does great good.

If such supervening symptoms as swelling of the body, etc., appear, in chronic cases of *Grahani*, such medicines as *Dugdhavati*, *Lauhāparpati*, *Swarnāparpati*, *Panchāmritāparpati*, *Rasāparpati*, may be prescribed.

If there be constipation in *Grahani* (in the variety known as *Sangraha-Grahani*) or, indeed, in any other variety of the disease, the medicine to be administered, should consist of *Ptychotes ajowan* and *Vit* salt in equal quantities. The measure recommended is four annas in weight. Clarified

butter of cow's milk, mixed with rock-salt, if used, does much in curing constipation and making the stools easy.

In *Grahani*, both in the mature and the immature stages, the diet is the same as that in *diarrhœa*.

• Diet.

The gruel of (Kapittha) *Feronia elephantum*, dry pieces of the fruits of *Ægle marmelos*, *Oxalis corniculata*, (*Amrula-sāka*) and the bark of the fruits of *Punica granatum*, each two tolas in weight, mixed with an adequate quantity of whey, should be given. In *Grahani* caused by vitiated wind, the gruel mentioned above is to be boiled with a little quantity of the decoction of (Panchamuli) the five roots. In all varieties of the disease, whey is specially beneficial. The patient should drink as much whey as he easily can. Unless attended to promptly, this disease becomes formidable. One feature of the disease deserves to be mentioned. The patient retains his consciousness to the last. The Rishis prayed for death through *Grahani*.

CHAPTER IX.

HÆMORRHOIDS OR PILES.

AT a distance measured by the width of four fingers and a half inwards from its mouth, there are three rings in the rectum. These are called *valis*. The innermost one, of the width of a finger and a half, is called 'Pravāhani.' The next, which is of the same width, is called 'Visarjjani.' The third, which is of the width of one finger, is called 'Samvarani.' The remaining space, of the width of half a finger, is called the mouth of the rectum. Wind, bile, and phlegm, becoming vitiated, vitiate the skin, flesh, and adeps, and cause cutaneous excrescences to grow from the rings spoken of above. These excrescences are called Piles. They are of two kinds, *viz.*, External and Internal. When they appear outside the mouth of the rectum, they are called External; when inside, they are known as Internal Piles. Besides the rectum, piles or hæmorrhoids manifest themselves in the penis, the nose, the ears, and certain other parts of the body.

The general symptoms of this disease are constipation of the bowels, indigestion, excessive pain during defecation of hard stools, and discharge of blood from the fleshy growths. From a few drops to half a seer of blood may be seen to be the

measure of the discharge. When the disease has assumed a severe form, discharges of blood may take place during urination or even when the patient sits firmly on any hard or soft seat.

Generally speaking, piles are of six kinds, *vis.*, wind-born, bile-born, phlegm-born, that born of all the three faults, blood-born and constitutional. Piles born of any two of the faults present the symptoms of each of the faults in a state of union and their treatment is not dissimilar to that followed in the case of piles born of each of the two faults. Only it should be a combination of the two separate modes of treatment. Hence, piles born of any two of the faults are not regarded as a separate variety.

Wind-born piles arise from eating food that is astringent, or pungent, or bitter in taste, or that is dry, or cold, or light; or from abstemious diet, strong alcoholic drinks, excessive sexual indulgence, fast, residence in a cold country, excessive physical exercises, grief, exposure to strong wind and heat of the sun, and such other causes. Autumn and such seasons as are cold are favourable to the formation of piles. There is no secretion from the fleshy excrescences. There is, however, a slightly throbbing pain. As regards the excrescences, their shape varies greatly. Some are like the fruits of *Momordica monodelpha*, some like dates, some like jujubes, some like the flowers of *Nauclea cadamba*, and some like mustard seeds of the white variety. The excrescences seem to have a drooping aspect. They are of a smoky colour, hard, dry to the touch like dust, and rough like the tongue of a cow. Every one of them is covered with fine prickles like the fruits of *Momordica mixta*. None

of them is straight. The ends generally are keen and needlelike, with many cracks. The patient feels great pain in the head, the sides, the shoulders, the thighs, and the pubic regions. Sneezing, eructations, a sensation of heaviness in the stomach, pain in the chest, disgust for food, coughing, asthma, inequality of appetite, sounds like the blare of conchs within the ears, delusions, painful defecation of scanty stools, which, again, consist of hard and slimy scybalæ, with froth and sound, and the gradual darkening of the skin, nails, stools, urine, eyes, and the face, are some of the other symptoms. From this disease, abdominal tumours, spleen, dropsy, and calculi may arise.

Bile-born piles arise from eating food that is pungent, or sour, or saline, hot to the touch or of heating qualities, sour in course of digestion, or of keen properties; taking in large measures medicines of keen virtues; drinking alcohol; exposure to the heat of fire or the sun; excessive physical exercises; wrath, malice, residence in hot countries, and similar causes. The hot season is peculiarly favourable to the appearance of this disease. The fleshy excrescences become red, or yellow, or dark in colour, but their extremities are always blue. Their shape resembles the tongue of the parrot, or a piece cut out of the human liver, or leeches. The middle portions are thicker, like a grain of barley. They are longish but not large. They are hot to the touch, and soft. They are of a fishy smell. Thin blood is often secreted by them. There is burning pain, more or less continuous. Sometimes the excrescences become inflamed and ripen. Bile-born piles may bring about fever, copious perspiration, thirst, swoons, disgust for food, stupefaction, and liquid stools containing undigested matter and

blue, or yellow, or red in colour. The skin, nails, stools, eyes, and the face gradually assume a greenish, or yellow, or yellowish hue.

. Phlegm-born piles arise from eating food that is sweet,

Phlegm-born Piles. oily, cold, saline, and heavy; absence of exertion or toil; sleep at daytime;

lying on soft beds; sitting on soft seats; exposure to east-winds or winds blowing against the face; residence in cold countries, and a total absence of mental exertion. The cold season is favourable to the generation of the disease. The fleshy excrescences become deep-rooted, thickly close to one another, attended with little pain, white in colour, long, thick in form, oily in appearance, hard and unyielding to pressure, heavy, slimy, smooth, and constantly itching. Their shape resembles that of bamboo sprouts, or seeds of the jack fruit, or the teets of the cow. No blood or any kind of foetid liquid is secreted by them. In defecating, even when the stools are hard, the excrescences do not burst. The patient often feels pain in the pubic regions as if they are bound with cords. There is pain in the sphinctre and the rectum also. The patient feels that these are being dragged out by some invisible force. There are, besides, asthma and coughing and nausea. Salivary secretions constantly occur. From the rectum also, foetid secretions take place. Disgust for food, inflammation of the schneiderian membrane, diabetes, difficulty of micturition, giddiness of the head, cold fever, decay of virile power, weakness of the digestive fire, diarrhoea, *Grahani*, and other ailments, whose chief characteristic is indigestion, are brought about. Copious stools are passed, mixed with mucus, resembling fat, and possessing the characteristics of the stools passed in dysentery. The skin, nails, stools,

urine, eyes, and the face of the patient gradually assume a pale colour and oiliness of appearance.

The causes and the symptoms of piles born of each of the faults have thus been set forth.
 Piles born of two or all the three faults. As regards the causes and symptoms of piles born of any two of the faults or all the three faults, they are of a mixed character and exist in a combined state. These causes and symptoms, therefore, need not be set forth separately.

All those causes which bring about bile-born piles generate blood-born piles as well. The fleshy excrescences in this variety of the disease take the form of banian sprouts and become red like either the fruits of *Abrus precatorius*, or corals. If pressed by hard stools at the time of defecation, discharges take place of copious quantities of vitiated and warm blood. Through loss of blood, the patient becomes yellow like a frog. He soon catches those diseases which arise from loss of blood, and becomes pale, wasted, weak, and incapable of exertion. His senses suffer premature decay. The stools become dark, hard, and dry, and the downward motion of wind ceases. Besides these, almost all the symptoms of bile-born piles manifest themselves.

If either of the parents or both have piles, or if at the time of begetting the child, either Constitutional Piles. or both of them indulge in those practices which generate piles, the child then gets piles constitutionally. This variety of the disease is called Constitutional piles. In this disease, the fleshy excrescences assume ugly forms. They become rough and hard, and either red or pale in colour. Their ends are directed inwards. The patient becomes lean or emaciated. He eats

very little. His digestive fire is weak. His voice becomes weak. His disposition becomes wrathful. His body becomes covered with swollen veins. His virile power becomes weakened and he becomes afflicted with diseases of the eye, the ears, the nose, or the head. A rumbling noise is generally heard in his stomach and intestines. The chest becomes heavy as if covered with a wet cloth. Disgust for food is another supervening symptom. In consequence, again, of the predominance in the patient's constitution of any one or any two faults, the symptoms of piles born of that or those faults also manifest themselves to some extent.

If in blood-born piles, symptoms appear of the bile-born variety, the disease is known as blood-born piles with supervening bile.

If there is more dryness than usual in the food taken, then wind supervenes in blood-born piles and the blood that is discharged is thinner and redder and accompanied by froth. Pain is felt in the waist, the thighs, and the rectum. A general weakness also pervades the body. Blood-born piles with phlegm supervening arise from food that is heavier and more oily. The stools which are always watery, become oily, heavy, cold, and white or yellow in colour. The blood that is discharged is thick; sometimes the bloody discharge is slimy and pale, and consist of fibres. The anus becomes slimy, and the patient feels that a wet plug has been inserted in the rectum.

In piles, all the life-breaths, *viz.*, 'Prána,' 'Apána,' 'Samána,' 'Udána,' and 'Vyána,' the five kinds of bile, *viz.*, 'Alochaka,' 'Raujaka,' 'Sád'haka,' 'Páchaka,' and

Why piles are difficult
to cure.

'Bhrájaka,' the five kinds of phlegm, *viz.*, 'Avalamvaka,' 'Kledakā,' 'Rodhaka,' 'Tarpaka,' and 'Āleshmaka,' and the three rings, *viz.*, 'Pravāhani,' 'Visarjjani,' and 'Samvarani,' all become simultaneously excited. Hence this disease is naturally difficult to cure, is very painful, produces many other ailments, and affects almost every organ of the body.

Those piles which attach themselves to the outermost ring called 'Samvarani,' which arise from the vitiation of only one fault, and which are not older than a year, are capable of being easily cured.

Those piles which attach themselves to the ring in the middle, *viz.*, that called 'Visarjjani,' which arise from the vitiation of two faults, and which are older than a year, are difficult to cure. Those, again, which are constitutional, or which arise from the vitiation of all the faults, and which attach themselves to the innermost ring, *viz.*, that called 'Pravāhini,' are regarded as incurable.

If inflammatory swellings appear simultaneously in the hands, feet, face, navel, anus, and testicles of a patient afflicted by piles, and deep-seated pains are felt in the chest and sides, or if such symptoms supervene as swoons, vomiting, pain in every part of the body, fever, thirst, and inflammation, followed by suppuration, of the mouth of the anus, the case terminates fatally, or, if only the symptoms supervene, *viz.*, thirst, disgust for food, deep-seated pains in the abdomen, copious discharge of blood, inflammatory swellings, and diarrhoea, death may even then follow.

The fleshy excrescences which sometimes appear in the pennis and other parts assume the form of earth worms. They are slimy and soft. Like piles in the anus, these excrescences also are classed under different heads according to the particular fault or faults excited.

Moles which appear on the body are in reality a form of piles. These are known by the name of 'Charma-kila.' The particular life-breath called 'Vyana,' mingling with phlegm, produce these fleshy excrescences. If the wind be unusually excited, even moles become painful. The patient feels as if he is pricked by a hundred needles. The fleshy growths called 'Charma-kila,' are hard to the touch. If bile predominates, they become oily in appearance, knotty and of the same colour as that of the skin.

At the outset those means must be adopted by which the wind may be restored to its normal state, and the strength of both the digestive fire and the body may be increased. If black sesame seeds, divested of husk, of the weight of 1 tola, sugar candy 1 tola, and butter 1 tola, be taken every morning, the wind regains its normal motions and the patient experiences considerable relief. If only black sesame seeds, divested of husk, of the weight of 4 or 5 tolas, be taken every morning, and a little cold water is taken afterwards, similar relief may be felt. If the stools be watery and frequent, the treatment should be like that in diarrhoea caused by vitiated wind. If there is constipation of the bowels, the treatment should be like that of Epistasis. In constipation, give the patient *ajowan* seeds, (*Ptychotis ajowan*) and Vit-salt, properly powdered

and in equal measures, with a little whey. If a leaden tube, rubbed with *ghee* and rock salt, be daily inserted into the rectum, it cures constipation. Another good remedy consists of this : take the bark of the roots of '*Plumbago zeylanica*, and reduce it to a paste by grinding it with the aid of water. Take an earthen vessel and plaster the inner surface with the paste. When the plaster is sufficiently dry, use the vessel for making some curds. These curds, or the whey made of them, relieves piles to a considerable degree. A small measure of the fruits of *Piper longum* reduced to powder, or the roots of *Convolvulus turpethum* reduced to powder, and the powdered roots of *Croton polianthrum* mixed with powdered *Chebulic myrobolans* constitute a good remedy in piles. Black sesame seeds of the weight of 1 tola, and 1 rati of the powder of the *Muti* of *Semecarpus anacardium*, by increasing the strength of the digestive fire, does great good in piles. Another remedy is the powders, in equal measures, of *Chebulic myrobolans*, black sesame seeds divested of husk, the fruits of *Phyllanthus emblica*, *Uvæ passæ*, and liquorice, with the juice of the bark of *Grevia asiatica*. *Chebulic myrobolans* soaked in cow's urine for a day or two form a good medicine. The bulbous root of *Arum campanulatum* (ol), of either the wild or the cultivated variety, should be burnt, according to the method called *Putapàka*, after being plastered over with earth. The burnt substance mixed with mustard oil and salt, should be given to the patient. Mixing the powders, in equal quantities, of rock salt, the roots of *Plumbago zeylanica* the seeds of *Holarrhena antidysenterica*, barley divested of husk, the seeds of *Pongamia glabra* (Dahar karanja), and the seeds of *Melia azedarach*, take from '2 to 4 annas

in weight and administer it every day with a little cold water. This medicine produces good results. Reducing the sticks of *Luffra amara* to ashes, dissolved there in water that is six times their measure.* The water should then be strained one and twenty times through a piece of cloth. A few brinjals should be boiled in the strained water. The boiled brinjals should then be fired in *ghee*. The patient should be directed to take them with a little treacle. Without gorging he should eat them till what is known as gratification. After eating, he should drink a little whey. If he does this for seven days, even severe forms of piles including the constitutional variety is capable of being checked.

If blood discharges take place, they should not be immediately checked, for if the vitiated blood be prevented from flowing out, pain in the anus, epistaxis, and other diseases due to the storage of vitiated blood, are sure to manifest themselves. In some cases, however, if the discharge be copious, and if it threatens the very life of the patient, it should be promptly checked. Black sesame seeds divested of husk, of the weight of 1 tola, and sugar of the weight of half a tola, if pounded together and administered with a cchatak of goat's milk, can promptly check the discharge of blood. The leaves of the lotus plant (*Nelumbium speciosum*), pounded with sugar, forms a good remedy in blood discharge. In the morning, goat's milk (without being mixed with any drug) should be taken. The filaments of the lotus, honey, fresh butter, sugar,

* That is if one cup of ashes be taken, there should be six cups of water.—T.

and the flowers of *Mesua ferrea*, should be powdered together into a paste and given to the patient. *Oxalis corniculata*, the flowers of *Mesua ferrea*, and 'Nilsundi,'—these three, or *Sida cordifolia* and *Hedysarum gangeticum*, these two, pounded together and mixed with the *manda* of fried paddy, should be administered. Every morning the patient should take black sesame seeds, divested of husk, and butter, each 2 tolas in weight, or butter 1 tola, and the flowers of *Mesua ferra* or the filaments of the lotus, reduced to powder and of the measure of 4 annas and sugar 4 annas, mixed together; or whey mixed with the cream of curds; black sesame seeds pounded, 1 tola, sugar half a tola, and goat's milk 1 chatak, or take 2 tolas of these mixed together, viz., *Mimosa pudica* (the sensitive plant), Nilsundi, the gum of *Bombax malabaricum*, *Symplocos racemosa*, and *Pterocarpus santalinus*; and 16 tolas of goat's milk, and 64 tolas of water. Boil all these together, till reduced to the measure of milk. Strain it through a piece of cloth, and give the strained liquid to the patient to drink. The juice of new leaves of *Punica granatum*, 1 tola, or the juice 1 tola in weight, of the leaves of marigold or of *Celsia coromandeliana* (koksima), mixed with half a tola of sugar, forms a good medicine. Both of them are capable of stopping the discharge of blood. The decoction of the bark of *Holarrhena antidysenterica*, or of dried Bael fruits, with dry ginger powder thrown into it, should be given to the patient to drink. Half a tola of the bark of *Holarrhena antidysenterica*, pounded with whey, or the juice, 2 tolas in weight, of the roots of *Asparagus racemosus*, mixed with goat's milk, is another remedy that very often proves beneficial. All these medicines stop hemorrhagic discharges.

from blood, Besides these all those medicines which are beneficial in Hemorrhages due to excited bile, may, with discretion, be prescribed in piles.

In addition to the medicines named above, there are
 • A few special medicines some well-known remedies mentioned in the ancient medical scriptures. They should be administered with discretion,

according to the strength of the fault that has been excited or this or that supervening symptom. They are 'Chandánádi pāchana,' 'Marichádi churna,' 'Samaçarkara churna,' 'Karpurādyā churna,' 'Vijaya churna,' 'Karanjádi churna,' 'Bhallátāmrita yoga,' 'Daçamula gura,' 'Nāgarādyā modaka,' 'Swalpaçurana-modaka,' 'Vrihachcharana-modaka,' 'Kutajaleha,' 'Pránadá-gritika,' 'Chandraprabha-gritiká,' 'Játiphaládi-bati,' 'Panchānana-bati,' 'Nityadita-rose,' 'Dantya-rishta,' 'Abhayárishta,' 'Chavyádi-grita,' 'Kutajádyā-grita' &c.

For severing the fleshy excrescences which protrude outwards, apply a drop only of the gum of *Euphorbia neriifolia*, mixed with powdered tumeric. This produces the desired result. By rubbing the powdered fruits of *Luffa amara*, the same result may be produced. Another remedy is the gum of *Asclepias gigantia*, the gum of *Euphorbia neriifolia*, the leaves of bitter gourds, and the bark of *Pongamia glabra*, taken in equal measures, and pounded together with goat's milk. The paste thus prepared should be plastered over the excrescences. If those be internal, sticks should be made of the paste. When dry, they should be soaked in the oil of sesame seeds. By inserting one after another, a few sticks into the rectum, the piles may be severed and the pain caused by them be relieved.

The following are some of the other medicines prescribable in this disease. Take a little quantity of old treacle, dissolve

it in water ; sprinkle over it a small measure of the powder of the fruits of *Luffa amara* (*Ghosha*). Boil the water till it becomes sufficiently thick, make small sticks of the thick extract. These sticks should, one after another, be inserted into the rectum.

The roots of *Luffa amara* (*Ghosha*) reduced into paste by being pounded with the aid of water should be used as plasters over the anus. The bulbous roots of *Amorphophallus Campanulatus*, tumeric, the roots of *Plumbago seylanica* and fried borax, pounded together and mixed with old treacle, or with 'kánji'. It should be used as plasters over the anus.

Bitter gourds (a wild variety of *Lagenaria vulgaris*), with the seeds, should be pounded with kánji. The paste should be used as plasters.

The fruits of *Piper longum*, rock salt, the bark of *Applotaxis auriculata* (*Kushtha*), and the fruits of *Mimosa sirissa*, pounded together with the gum of *Euphorbia neriifolia*, or with the gum of *Asclepias gigantea*, may form an efficacious plaster. Tumeric and *Luffa amara*, pounded together and mixed with mustard oil, form another plaster that is beneficial.

Repeatedly applying tumeric reduced to powder and mixed with the gum of *Euphorbia neriifolia* to a thread made of cotton, the thread should be used for tying each of the fleshy growths. These may be cut off painlessly by adopting this simple expedient. Kácisa oil and Vrihat Kácisa oil, applied to the fleshy growths, succeed in severing them gradually.*

* 'Kácisa' means sulphate of Iron. The ingredients of 'Kácisa oil' as also of 'Vrihat Kácisa Oil' are, of course, well-known. They will be set forth in the proper place.

Old Çáli rice, the soup of *Phaseolus mungo*, of gram or chick-pea, and *Dolichos biflorus*, and curries made of such vegetables as the fruits of *Trichosanthes dioica*, and of *Fricus glomerata* (of 'the smaller variety'), *Colocasia indica*, *Amorphophallus campanulatus*, unripe radishes, raw or unripe 'pepia' fruits, plantain flowers, raw plantains of the variety called 'Thote,' the fruits of *Memordica mixta*, ripe fruits of *Cucurbita pepo*, and of *Moringa pterygosperma*, milk, ghee, butter, food cooked in ghee, sugar candy, *Uvæ passæ*, grapes ripe fruits of *Ægle marmelos*, ripe 'pepia,' whey, *Elletaria cardamemum*, and similar other articles should be taken. Baths in current water or large lakes and tanks, and enjoyment of pure air are also recommended. Besides these, the patient should always take such food and indulge in such practices as preserve the normal course of the wind. If the discharge of blood in this disease be copious, the diet and practicess recommended in hemorrhages due to excited bile should be adopted.

Fried or burnt articles, all kinds of heavy food, curds, cakes, *Phaseolus radiatus*, the variety of doliches that is especially called 'Simbi,' *Lagenaria vulgaris*, etc., should be avoided. Exposure to sunshine or the heat of fire, to east winds, suppression of the urgings of stools and urine, sexual congress, riding on horseback, sitting on hard seats, and all such acts as tend to excite the wind, should also be abstained from.

CHAPTER X.

ANOREXIA, LOSS OF APPETITE AND INDIGESTION.

EXCESSIVE drinking of water, intemperate eating, constant
Causes of the loss of use of food which is too heavy to digest,
appetite. eating with dislike, suppression of the
urgings of urine and stools, excessive anxiety, sleep at day
time, and night-keeping, weaken the digestive power. The
same is the result if the food taken be not well masticated, or
if the patient exposes himself to too much cold or too much
heat. Fault of the digestive organs and sometimes worms in
the stomach may create the malady. Sporting in water for
a long time as also excessive use of betel leaves with nuts
and spices, are some of the other causes which bring about
loss of appetite.

Loss of appetite, irregular eating, *i. e.*, eating sparingly
one day and gorging the next, or
Cause of indigestion. eating at irregular hours, eating
articles that have lost their freshness or that are rotten,
eating with unwillingness, disgust, fear at the time of
eating, mental torture in consequence of anger, cupidity, or
sorrow, and excessive mental labour just after eating, are
some of the causes of indigestion.

Indigestion is generally regarded as of four kinds, *vis.*,
Division of indigestion. *Amajirna, Vidagdha-jirna, Vishtabdhajirna, Rasaseshajirna.* These are explained below.

Amājirna is caused by the excitement of phlegm ;
 Causes of the four sorts of indigestion. *Vidagdhaḥjirna*, by that of bile ; and
Viṣṭabdhajirna by that of wind. *Rasaseshaḥjirna* arises if the juice, the first product of the food taken, be prevented from being developed into blood.

In *Amājirna*, such symptoms as heaviness of the body, nausea, swelling of the cheeks and the eye-balls, and eructations with the taste and smell of the food taken, appear.

In *Vidagdhaḥjirna*, delusions, thirst, swoons, acid eructations, or eructations followed by vapoury exhalations, as well as other supervening symptoms of excited bile, appear.

In *Viṣṭabdhajirna*, flatulency, deep-seated pains in the abdomen, suppression of stools and of the downward wind, stupefaction of the bowels, swoons, prostration of the limbs, and other symptoms of excited wind, present themselves.

In *Rasaseshaḥjirna* disgust for food, absence of free action of the heart, and its heaviness in consequence, thereof are some of the special symptoms that manifest themselves.

In all sorts of indigestion, heaviness of the stomach, prostration of the body, cramps in the abdomen, and storage of wind supervene. Sometimes there is constipation, and sometimes purging as in diarrhoea. The throwing up of the food taken is another symptom that sometimes appears.

From indigestion arise such maladies as swoons, delirium, vomiting, secretions in the mouth, langour, and delusions.

Proper diet is the general remedy of all sorts of indigestion. *Chebulic myrobalans* (Hari-taki) and dry ginger (Sunt), taken in

Treatment of *Anorexia*.

equal measure and reduced to powder, are sure to give relief if used every day with treacle or rock-salt. Every day at morning carbonate of potash (*Yavakshāra*) and dry ginger reduced to powder and taken in equal quantities should be licked with clarified butter, and a little quantity of hot water should be drunk afterwards to strengthen the digestive fire. Dry-ginger alone can achieve the same end under the same circumstances. Ginger and salt used before dinner are sure to cure anorexia. The tongue and the throat are also cleared thereby. Besides these, *Vadavānalachurna*, *Saindhavāddichurna*, *Saindhavādyachurna*, *Hingwas-takachurna*, *Swalpāgnimukhachurna*, *Vrihadagnichurna*, *Bhāskaralavana*, *Agnimukhalavana*, *Vadavānalarasa*, *Hutsanarasa*, *Vrihathutasanarasa*, *Agnitundivati*, and medicines of such nature, may be prescribed with careful consideration. The medicines that cure Indigestion also cure Anorexia.

Ordinary treatment of indigestion.

In *Amājirna*, emetics, in *Vidagdhaājirna* fast, in *Vishtabdhājirna* vapour baths and in *Rāsaseshajirna* sleep before dinner, ought to be prescribed.

Take of *Acorus calamus*, one tola in weight, and rock-salt of the same quantity. Dissolve it in a seer of hot water. Give it to the patient. It will act as an emetic and the patient will feel himself easy.

Special treatment of *Amājirna*.

Piper longum, rock-salt, and *Acorus calamus*, taken in equal quantities and grinded together into a paste and then dissolved in cold water may be prescribed.

The decoction of *Coriandrum sativum* and dry ginger, each one tola in weight, cures the griping pains in the abdomen.

Dry ginger, or *Piper longum*, or *Chebulic myrobolans*, or the husk of the fruits of *Punica Granatum*, reduced to powder and used with treacle is sure to alleviate the constipation in *Amājirna* and piles.

If indigestion be felt in the morning, *Chebulic myrobolans*, dry ginger, and rock-salt, taken in equal quantities and reduced to powder, should be used before dinner. It is an excellent preventive of indigestion.

In *Vidagdhājirna*, cold water is to be given to the patient to drink. It facilitates the digestion of indigested food. Cold water has a beneficial action upon even the excited bile. It makes the stools easy. If the food produces acidity immediately after being eaten and a burning sensation is felt in the heart, the stomach and the larynx in consequence thereof, adequate quantities of *Chebulic myrobolans*, and the dried fruits of *Vitis vinifera* (known as *Kismīḥ*), grinded together, should be licked with sugar and honey. Take of *Chebulic myrobolans* one tola in weight, and the fruits of *Piper longum*, the same quantity, and boil them in thirty-two tolas of *Kanji*. When the *Kanji* is reduced to eight tolas, have the product mixed with one anna of rock-salt. When this is swallowed, eructations with vapoury exhalations are sure to follow. Strong indigestion is alleviated and hunger is excited the very day.

In *Vistabdhājirna*, vapour baths and salt should be administered. In indigestion accompanied by *Rasa*, fast, sleep at day time, and avoidance of places exposed to strong

Special treatment of
Vidagdhājirna.

Special treatment of
Vistabdhājirna.

breezes, constitute the general treatment. Taking equal quantities of *Ferula assafætida*, dry ginger, *Piper longum*, *Piper sativum* and rock-salt, make a paste by grinding them together, with water, and apply it on the belly, and then let the patient sleep at day time before dinner. This alleviates all varieties of indigestion. Take equal quantities of *Chebulic myrobolans*, *Piper longum*, and salt of the variety known as Sauvarchala, each reduced to fine powder, and then, according to the particular fault excited, mix it with either the *mantha* of curds, or hot water. By administering such a compound, all the four kinds of indigestion, loss of appetite, disgust for food, flatulence of the stomach, abdominal tumours due to vitiated wind, and abdominal pains, are speedily alleviated. It is also seen that if equal measures of these reduced to powder, *viz.*, dry ginger, *Piper longum*, black pepper, the seed of (Danti) *Baliospermum montanum* (syn., *Croton polyandrum*), the roots of (Teori) *Ihomæa turpethum* (syn., *Convolvulus turpethum*), the roots of (Chitraka) *Plumbago zeylanica*, and the roots of *Piper longum*, be taken and mixed with old treacle, and administered in the morning, beneficial results follow in all kinds of indigestion, loss of appetite, epistaxis, abdominal pain, enlargement of the spleen, dropsical swellings, and jaundice. Beneficial results on epistaxis are obtained from cold infusion of black pepper, or black pepper reduced to paste and dissolved in water.

In all kinds of indigestion, all such medicines as cure loss of appetite, boluses known as Lavangádyá, Sukumára, and Trivrit, the *arishta* known as Mustaka, the mixture called Kshudháságará, the pills called Tanganádi, Çankha, Maháçankha, the mixture called Chintámani, the Ghrita called Agni, and similar other drugs, should be prescribed.

The medicines spoken of in the chapter in the diseases of the Grahani, are seen on many occasions to prove beneficial.

During the first stage of indigestion it is necessary to fast. If fast does not cure it, such light food as barley, arrow-root, the paste of boiled (Çringataka) *Trapa bispinosa* dissolved in water, should be taken. As indigestion is gradually alleviated and appetite comes back, old and fine rice boiled, with the decoction of (Masura) *Vicia lens*, (syn. *Cicer lens*), may be taken during daytime. The liquid curry may also be taken of such fishes as *Koi*, *Māgura*, *Singhi*, and *Mahurola*, as also of such vegetables as *Trichosanthes dioica*, *Solanum melongena*, the variety of plantains known as *Thôte kala*, and the leaves of *Pæderia fetida*, also whey, with the juice of *Citrus medica* and that other variety of *Citrus* known as *Pāti* in Bengal. At night such light food as barley, etc., may be taken. If appetite increases and if the patient is able to digest rice taken twice a day, then rice of the kind already adverted to may be taken at night also. Raw fruits of the *Ægle marmelos* burnt in fire, pieces of the same fruit boiled in sugar, pomegranates, and crystallised sugar, may also be given. In indigestion and loss of appetite, the patient should not drink water till two or three hours after meals. Rising from bed in the morning, the patient should drink a little cold water. It does him good.

All articles cooked in *ghee*, meat, cakes, and other food that take a long time to digest, all articles which are of keen potency, fried and burnt articles, copious drinks of water or any other liquid, bread made of the flour of

Food and practices forbidden.

barley or of wheat, (Masha) *Phaseolus radiatus*, pot-herbs, sugarcane, treacle, milk, curds, ghee, thickened milk, coconuts, grapes, and all articles which are laxative in action, too much salt, etc., should be avoided. The patient should also avoid rubbing his person with oil, night-keeping, sexual congress, and baths. These are productive of very baneful consequences. The fact is, all articles which are not easy of digestion, and all acts which retard digestion, should always be rightly abstained from.

CHAPTER XI.

VISUCHIKA OR CHOLERA.

In the Hindu medical scriptures, Visuchika is included in the general ailment of indigestion.

What is Visuchika.

The contagious character of this disease is so great that if a single person happens to be attacked by it in consequence of indigestion, the disease spreads rapidly and attacks many persons residing in the same place. In fact, it rages as an epidemic. It is a dangerous disease. It quickly despatches with the patient. For all these reasons it is regarded as a separate disease by the physicians, and hence it is separately treated in the book.

Excessive rains, damp and still air, excessively hot air, impure water and air, excessive labour, irregularity of diet, mental torture in consequence of terror, sorrow and grief, residence in a thickly populated quarter, debility of the body, night-keeping, are the causes of this disease.

When cholera appears without previous diarrhœa, such symptoms as debility of the body, tremours of the limbs, paleness of the countenance, pain in the upper part of the abdomen, synchronism, headache, and swimming of the head, manifest themselves as its premonitory symptoms.

Simultaneous vomiting and stools are the ordinary symptoms of this disease. At the
 General symptoms. outset, once or twice the stools passed resemble those of diarrhoea, while in the vomited matter indigested food is seen. The stools then become watery or like decoctions of barley or rice, or water mixed with rotten gourd. The vomited matter also resembles water. Sometimes the colour of the stools may become red. There is pain in the stomach. The smell of the stools resembles that of rotten fish. The urine is suppressed. Gradually the eyes sink as within a hole; the lips become blue; the nose becomes prominent; the hands and feet become cold and contracted; cramps appear in the arms and legs; the extremities of the fingers shrink; the body becomes bloodless, and covered with sweat. The pulse becomes weak, and cold, and yet at the same time quick; it gradually becomes imperceptible. Hiccup appears; as also excessive thirst, unconsciousness, delusions, delirium, fever, burning sensation within, hoarseness or total suppression of voice, restlessness, sleeplessness, tossing of the head on the pillow, pain in the head, noises within the ear, diverse kinds of optical illusions, coldness of the tongue, coldness of the breath, contraction of the lips and consequent exposure of the teeth, and similar other symptoms also appear.

If the wind be more excited than the other two faults, then vomiting and purging do not be-
 The faults excited. come excessive. Pains in the abdomen, langour of the limbs, dryness of the mouth, swoons, delusions, contraction of the muscles and veins, and similar symptoms manifest themselves in a pronounced manner. If the bile be excessively excited, then purging becomes

copious. Fever, burning sensation within the body, thirst, stupefaction, and delirium manifest themselves in a marked degree. If the phlegm be excited more than the bile and the wind, vomiting becomes copious. Sloth, heaviness of the limbs, fever with sensation of cold, and disgust for food, become the marked symptoms.

At this stage of the disease, the temperature of the body becomes less than usual. The thermometer indicates 96°. In some, an hour or two before death, the temperature increases in the forehead, the cheeks, and the chest. If amongst the symptoms of this disease, swoons, burning sensation of the body, sleeplessness, paleness of complexion, excessive pains in the stomach, head, and chest, delusions, delirium, loss or hoarseness of voice, shivering, and restlessness appear, the patient's life cannot be hoped for. If, however, purging and vomiting becomes gradually less, if the stools improve, showing bilious secretions in them, if the temperature increases, if the pains in the stomach disappear, if the breath becomes regular, the thirst decreases, sleep comes, the normal complexion reappears, and discharge of urine takes place, the cure of the patient may be hoped for. The attacks of this disease generally occur in the morning or at night. Sometimes, however, the attacks occur at other hours. There is no certainty about its duration. Some are carried off within two to four hours. Some linger in pain for two to four days and then fall victims to it.

It is necessary to begin treatment when the first symptoms of this disease show themselves. It is not proper to administer strong astringents at the outset, for if purging be stopped through their operation, vomiting would become more copious and

such symptoms as flatulence of the stomach and the like may supervene. Besides, the purging in consequence of being checked for a while, may become more violent than before. For this reason astringent medicines should be administered in small measures and repeated doses during the first stage. If the disease be induced by indigestion, it is proper to give such medicines as aid digestion and as are mildly astringent. In cholera brought about by indigestion, such medicines as 'Nripaballabha' and the rest are especially suitable. When the disease is induced by other causes, the following medicine may be given: Dāruchini (the bark of *Cinamomum zeylanica*) three-fourths of a tola; Saffron, of the same measure; cloves, of half of that measure; and Elasukshma (*Elletaria cardamomum*), one-fourth of a tola. Each of these is to be separately pounded into fine pulv. With all these should be mixed sugar, cooked and refined, of the measure of twenty five tolas. With it should be mixed while chalk, reduced to fine powder and of the measure of a third of the whole quantity. Ten to thirty ratis of the pulv so compounded should, according to his own strength and the strength of the disease, be administered, in frequent doses, to the patient. To a patient whose age is from twenty to fifty years, half a rati of opium may be given with twenty ratis of the pulv adverted to above. To a patient whose age is below twenty years, the pulv only should be administered, without opium being mixed with it. The measure of the dose should be varied according to the age of the patient. Another medicine prescribable is the following: opium of the measure of half a rati; powdered pepper, a fourth of rati; assafoetida, of the same measure, and camphor, of one rati. These should be mixed together, and

given to the patient after each purging. Even after the purging has been checked, the medicine should be given for two or three days, thrice every day. The four drugs mentioned above, each of the measure stated, may be formed into pills for use as prescribed above, or, ten or twelve drops of our 'Karpurárishta,' mixed with a little sugar, may be administered at intervals of half an hour. The chief medicine, however, of this disease is the 'ásava' of opium. Five to ten drops, with cold water, should be administered. The other medicines which may be used in this disease are 'Mustadya' pills, 'Karpura rasa,' 'Grahnikapáta rasa,' and those medicines which have been mentioned in the chapters on diarrhoea and diseases of the Grahani, and which are capable of checking violent diarrhoea. During the time these medicines are administered, small measures of the wine called 'Mritasanjibani,' mixed with water, if given, produce beneficial results. If, however, the symptoms be present of a tendency to vomit, or hiccup instead of giving the wine named above, 'Sidhee' or 'Sirkhá' may be given with water. By it, hiccup and pains in the stomach and thirst may also be allayed. Another preparation that is beneficial is the following. Indrayava (seeds of *Holarrhena antidysenterica*) of the measure of one chattack should be taken and boiled in one seer of water. It should be taken down when three fourths of the water have evaporated, one tola of the decoction that remains should be given to the patient for drink every half an hour.

The roots of Apang (*Achyranthes aspera*, Linn.) pounded on a stone with water form another good medicine for this disease. The decoction of the leaves of Uchchhe (*Momordica charantia*, Linn.) and Karela (*Momordica cha-*

rantia of the larger variety), sprinkled over with Pippali (*Piper longum*) reduced to fine pulv, may be given as drink. It allays the disease. The digestive fire also is increased by it. The decoction also of dried Bael (fruits of *Ægle marmelos*) and dry ginger, as also the decoction of dried Bael, dried ginger, and Katphal (the fruits of *Myrica sapida*) alleviates this disease.

Take a handful of fried paddy and one tola of sugar.

Means of checking vomiting and causing seer of water. A little while after, urination.

strain the water through a piece of cloth. Taking then the roots of *Andropogon muricatum* of the measure of one tola, the fruits of *Elletaria cardamomum* of the measure of half a tola, and Fennel seeds of the same measure, and pound them together into a fine pulv. Take also one tola Chandana (*Santalum album*) and rub it into a paste. Mix all these together. Give the patient half a tola of the liquid mixture at intervals of half an hour. This will check vomiting. Vomiting may also be checked by a plaster, applied to the abdomen of pounded mustard seeds. There are other medicines for checking vomiting that should be administered according to the condition of the patient. For causing urination the following remedy may be used. Give the patient the juice, of the measure of one tota, of the leaves of Himaságara, (otherwise called Páshanabhedi or Pátharchur, or Pátharkunchi, or Lohachur, that is, *Colcus Ambuinicus*, Linn). Another remedy is the decoction of the seeds of Gokhura (*Tribulus terrestris*, or *Tribulus lanuginosus*, Linn.), the seeds of Trapusa, (*Cucumis sativus*, Linn.), the seeds of Karkati (*Cucumis melo*, Linn.), and the seeds of Durálábha *Hedysarum alhagi*, Linn.), mixed with saltpetre reduced

to fine pulv, of the measnre of one-eighth of a tola. Spoonfuls of this may be given now and then. The decoction of these five roots, also, viz., Kuça (*Poa cynosuroides*, Linn.), Kāça (*Saccharum spontaneum*, Linn.), Çara (*Saccharum sara*, Roxb.), Ushira (*Andropogon muricatum*), and black sugar cane, may be administered with benefit. If half a cchatak of the Dhāras (*Hibiscus exculentus*, Linn.), be given three or four times, or one tola of the juice of the leaves of Sthalapadma (*Hibiscus mutabilis*, Linn.), mixed with a little sugar be administered, the patient is seen to urinate. The leaves of Pātharkucha (*Colcus amboinicus*, Linn.), and saltpetre, pounded together into a paste, and applied to the anus, may lead to urination.

By rubbing turpentine and wine on the arms and legs, cramps may be checked and prevented.
 How to prevent cramps. By rubbing only pulv of dried ginger, beneficial results may be obtained. The bark of *Applotaxis auriculata* and Saindhava salt, pounded into a paste by being mixed with the fermented gruel of rice and mustard oil, slightly heated, is another medicine that gives relief. The bark of *Cinamomum zeylanicum*, leaves of *Cinamomum tamala*, the bark of *Cymbidium tessaloides*, of *Aquilaria agallocha*, of *Moringa pterigosperma*, of *Applotaxis auriculata*, of *Acorus calamus*, and dill seeds, should be reduced to a fine pulv and then mixed with the fermented gruel of rice, and slightly heated. This also is another medicine used for checking and preventing cramps.

For checking hiccup in this disease those medicines should be applied which have been
 How to check hiccup. spoken of as efficacious in checking hiccup in fevers due to excitement of all the faults. The

juice of the pulv of *Musa sapientum* may also be given as snuff. Mustard plasters should be applied to the neck and the vertebral column.

For checking pains in the stomach plasters should be applied made of barley and the ashes of barley blades mixed together with whey and slightly heated, or, rubbing turpentine oil on the stomach, fomentation with hot water may be resorted to. Fomentation, without the previous use of turpentine, is also beneficial. Silken cloth, steeped in hot water, should be used for fomentation, first pressing out the water from it. If the patient feels thirsty, camphor water or ice should be given. Another medicine for allaying thirst is this: one tola of the spice known as 'Kababchini,' half a tola of liquorice, each reduced to fine pulv, and one-fourth of a tola of 'Kajjali,'* mixed with honey, should be given to the patient to lick. Of course, small measures should be given at a time. The decoction of cloves, and nut-megs, and the bulbous roots of *Cyperus rotundus*, also allays thirst and checks nausea. If perspiration be copious, the red powder known as 'Abira' should be rubbed on the body. The ashes of corals, mixed with honey, if licked, check perspiration. For checking severe head-ache cold-water lotion should be given. When loss of consciousness happens, heat should be applied to the hands and feet.

When there is little hope of life, and when the eyes become red as in fevers due to excitement of all the faults, with delirium, Certain remedies.

* Black Sulphide of mercury, prepared by rubbing together equal parts of sulphur and mercury till the globules disappear, is called 'Kajjali.'—T.

delusions, swoons, and supervening symptoms, the medicine called 'Suchikābharana rasa' should be administered. Two or three pills at a time, twice or thrice according to the condition of the patient, should be administered, with a little water of fresh-cocoanut. If this medicine does no good, administered twice, does no good, it should be given up. When the body becomes cold and death is expected, the medicine of our preparation, called 'Kasturikalpa rasayana,' sometimes produces marvellous effects, for the patient soon recovers heat and ultimately escapes death.

In treating this disease, the physician should always be very careful. The symptoms rapidly change, and there is no knowing when the patient may become worse. The patient's room, bed, and clothes should always be kept clean. Camphor, the gum of *Shorea robusta*, and spiced sticks of sulphur should frequently be burnt. The evacuations should be promptly removed and thrown out at a great distance from the house.

When the strength of the disease is great, the patient should fast. When the disease loses its intensity, when, indeed, the symptoms become favourable, and the patient feels a little appetite, arrow-root or sago or the 'pālo' of the fruits of *Trapa bispinosa*, boiled in water, should be given in a liquid form. The several kinds of gruel spoken of in the chapter on diarrhoea are also beneficial at this stage. Our 'Sanjibani food' is well-adopted to the requirements of the patient at this time. A little juice of *Citrus medica*, mixed with the kind of food that is administered, does great good. When the disease has been conquered and the patient's appetite is increased, the 'manda' of old rice

should be given, with the curry called 'juice' made of *Koi*, *Madgura*, and small fishes, or the broth of the meat of kids, and young animals. When digestion is improved, old rice, the piece of *Cicer lens*, juice made with small fish, the species of raw plantains called 'Thote-kalá,' the smaller variety of *Ficus glomerata*, immature fruits of *Trichosanthes dioica*, and leaves of *Pæderia fatida*, should be given in proper measure. No sweets should be taken by the patient except sugar-candy and 'Bátásá.'*

Till thorough cure, the patient should abstain from every kind of heavy food, Ghee, food prepared
 The acts interdicted. with Ghee, fried and burnt articles, etc. He should also abstain from baths in cold water, sexual indulgence, exposure to the heat of fire or the sun, physical exercises, and every act that produces fatigue. It has been already said that the chief cause of this disease is indigestion. One should, therefore, carefully abstain from everything that causes indigestion. If a case occurs in one's family or neighbourhood, one should not indulge in fear, for fear brings about indigestion, and indigestion, in its turn, brings about this dreadful disease.

* A preparation of boiled sugar.—T.

CHAPTER XII.

TYMPANITES.

Both 'Alasaka' and 'Vilamviká' (varieties of Tympanites) spring from indigestion. Those persons who are weak, or whose digestive fire is not keen, or who have phlegm in excess, or who suppress the urgings of stools, urine, and wind, and who take food that is heavy or hard, or food that is exceedingly dry, or cool, or unctuous, catch these diseases. The excited wind in their system comes into conflict with phlegm, and the result is 'Alasaka' and 'Vilamviká.' In 'Alasaka,' the patient suffers from excessive and painful flatulence; he screams out in agony, and swoons away. In consequence of indigestion, wind is generated in the stomach. Unable to escape downwards, it rises upwards and presses heavily against the heart and the lungs. Hence, hiccup and vomiting manifest themselves in an excessive degree. Purging also appears. Besides purging and vomiting, some symptoms of cholera are also seen in Tympanites. This disease is called 'Alasaka' because of the fact of the food that is taken remaining stationary in the stomach, without its being able to go down or come upwards.* The

* 'Alasa' implies idle, or stationary, or motionless. 'Ka' is a suffix. Hence, because the food remains motionless, the disease is called 'Alasaka.'—T.

symptoms of 'Vilamviká' are not of a different kind. When the symptoms of 'Alasaka' manifest themselves in aggravated form, the disease is called 'Vilamviká.' 'Vilamviká' is only an aggravated or more violent form of 'Alasaka.' Hence, 'Vilamvika' is more difficult to cure than 'Alaska.'

The treatment of both 'Alasaka' and 'Vilamviká' is the same. At the outset, the patient should be made to vomit by administering to him warm water mixed with salt. The patient may also be made to drink as much as he can the decoction of these, viz., the fruits of *Pongamia glabra*, the bark of *Melia azadirachta*, the seeds of *Achyranthes aspera*, the stem of *Tinospora cordifolia*, the leaves of *Ocimum sanctum* (of the white variety), and the seeds of *Holarrhena antidysenterica*. Vomiting results from the copious administration of this decoction. In both varieties of the disease, vomiting does great good. For alleviating flatulence and pains in the stomach, a plaster should be applied on the stomach, made of the following, viz., the bark of *Cedrus deodara*, barley of the white variety, bark of *Aplotaxis auriculata*, Dill seeds, Assafoetida, and Saindhava salt. These should be reduced into a paste, mixed with Kánji. By applying plasters of barley pulv and the ashes of barley stalks, mixed with whey and slightly heated, beneficial results of the same kind can be expected. Flatulence and pains in the stomach may also be alleviated by fomentation with heated Kánji. A little or a piece of silken cloth may be used for the purpose. For checking hiccup, the patient may snuff the juice of the bulbous root of the *Musa sapientia*. Mustard plasters may also be applied on the neck and the backbone. For checking eructations, the alkaline ashes known as 'Vajrakshára' and such other medicines as restore to the wind its usual motion, should

be given. In both these diseases, such medicines should be carefully administered as increase the digestive fire and cure indigestion.

In both these diseases, fast should be observed at the outset. Subsequently, light food should be given, agreeably to the measure of hunger or the power of digestion. As regards practices in general, the observations laid down on this head, in the chapter on cholera, fully apply.

CHAPTER XIII.

WORMS.

Worms, as affecting the human body, are of two kinds, *viz.*, those born of internal impurities, and those born of external impurities. Internal worms are regarded as of three classes, *viz.*, those born of stools, those born of phlegm, and those born of blood. Eating before the food last taken has been digested, excessive indulgence in food and drink that are sweet or sour, liquid food in excessive measure, drinking water that is not clean and pure, excessive indulgence in raw sugar, cakes, meat, pot herbs, *Phaseolus radiatus*, curds, and such other heavy food, food consisting of such inharmonious ingredients as milk and fish, milk and meat, absence of physical exercise, sleep at daytime, etc., generate worms within the body. When worms have been generated, the symptoms that manifest themselves are fever, paleness of the body, deep-seated pains in the stomach, diseases of the chest, general langour of the body, delusions, disgust for food, nausea, vomiting, watery secretions from the mouth, indigestion, distaste for food, itching of the nose, grinding of the teeth during sleep, sneering, etc.

Worms born of stools are generated in that division of the stomach which is called 'Pakkāçaya' (that is, the division where digestion takes place). These worms generally

The symptoms of worms generated in stools.

move about in the lower regions. Sometimes, however, they come upwards to the 'amáçaya' (that is, that 'division of the stomach where the food eaten goes first). When the worms come upwards, the breath of the patient emits a foetid smell. Stool-born worms are of various kinds. They are minute, or gross, or long, or globular. As regards colour, they are dark, or yellow, or white, or black. Some are as minute as the sprouts of paddy; some are as long and thick as earth-worms; some are round as balls; and some are flat and long like strips of leather. There are some, again, that are of the width and thickness of a Tumbi seed.* These sometimes attain to 18 feet in length. This kind of worm is generated in consequence of excessive indulgence in meat or eating meat that is not properly boiled or eating pork largely. These should be extracted with care, drawing them slowly and gently like threads. When the stool-born worms travel out of the place where they are generated, watery motions, deep seated pains in the stomach, paralysis of the stomach and intestines, emaciation of the body, roughness of the skin, paleness of complexion, frequent horripilation, weakness of the digestive fire, itching sensation in the anus, &c., are the indications that manifest themselves.

Phlegm-born worms are generated in the 'amáçaya'.

The symptoms of phlegm-born worms.	They move about that region of the stomach. Like stool-born worms, their shape and size are various. Their colour also is of various kinds. When phlegm-born worms have been generated, the symptoms that manifest themselves are nausea, watery secretions from the mouth, indigestion,
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Tumbi or katumbi is a wild variety of *Lagenaria vulgaris*.

digest for food, swoons, vomiting, fever, suppression of stools and urine, emaciation of body, constant sneezing, inflammation of the schneiderian membrane, and others of the like.

Blood-born worms are generated in the blood-bearing ducts (arteries and nerves). Eating food that consists of inharmonious ingredients like milk and fish &c., eating before the food last taken has been digested, and eating such articles as potherbs in an excessive measure, produce these blood-born worms. These worms are very minute, without feet, globular in shape and of a coppery colour.

Worms born of external impurities arise from sweet or unwashed filth of the body. Hence, Symptoms of worms born of external impurities. uncleanliness is the principle cause.

The shape and size of these worms are like sesame seeds. External worms are of two kinds *viz.*, 'yukas' and 'Likhyas'. The formers have many feet; they are dark in colour; and they live in such parts of the the body as are overgrown with hair. 'Likhyas' are very minute. They are white in colour; and they may sometimes be seen on the clothes one wears.

For the destruction of internal worms, one should take a little measure of the juice of the leaves of *Clerodendrum infortunatum*, as also Treatment. of the leaves of the 'pinapple' mixed with a little honey. Reducing the fruits of *Embelia ribes* to pulv, take one-sixteenth of a tola thereof, and give in to the patient, dissolved in a little cool water. Or, take two tolas of the fruits of *Embelia ribes* and making a decoction thereof, give it to the patient to drink. Of all drugs, *Embelia ribes* is the best for killing worms. The juice of the leaves of

the wild date palm, and the head of the same tree, are regarded as efficacious medicines for the destruction of worms. The following also have the property of killing worms, *viz.*, the juice of the leaves of *Erythrina indica* as also of the leaves of *Costus speciosus*; the juice of *Achyranthes triandra*; the juice of the seeds of *Butea frondosa*, and the decoction of the bark obtained from the roots of *Punica granatum*. The seeds of *Hyoscyamus niger*, mixed with a little Saindhava salt, taken in the morning, alleviate indigestion and kill worms. The other medicines prescribed for this disease are the following, *viz.*, the seeds of the wild variety of *Lagenaria vulgaris*, reduced to pulv, and mixed with whey or the water obtained from unripe coconuts; one-fourth of a tola of *Mallotus philippensis*, mixed with raw sugar; seeds of *Serratula anthelmintica*, of the measure of half a tola, thrown into a cchatak, of water and allowed to drench for 5 or 6 hours; the water or infusion only is to be taken, excluding the seeds. The paste, again, of these, *viz.*, the fruits of *Embelia ribes*, saindhava salt, ashes of barley blades, *Mallotus philippensis*, and *Chebulic myrobalans*, with the aid of a little whey instead of water, forms an efficacious medicine for this ailment. Gruel, made with whey and water in equal proportions, of the fruits of *Embelia ribes*, the roots of *Piper longum*, the seeds of *Moringa pterygosperma*, and black pepper, is another medicine. The gruel, however, should be mixed with carbonate of soda. Besides these, the other medicines are the pulv known as 'Párasiyádi,' the Kasháya known as Mustádi, 'Krimimudgara-rasa,' 'Krimighna-rasa,' 'Vipasdanga-lauha,' 'Krimighátini pills,' 'Triphaládyaghrita,' and 'Vidanga-ghrita.' Our own preparation, known by the name of 'Krimighátini batiká,' is an efficacious

remedy in worm diseases. For killing external worms, plasters should be applied, made of camphor well grinded with the juice of the leaves of *Datura fastuosa*. A plaster applied on the head, made of the seed of (*Nalita*) *Hibiscus cannabinus* pounded with kánji, kills all the lice on the head. The oil of *Embelia ribes*, as also of *Datura fastuosa*, is a good medicine for external worms.

Old rice boiled, soup made of small fishes, curries made of these, viz., the fruits of *Trichosanthes dioica*, the flower of *Musa sapientum*, the fruits of *Momordica charantia* (of both varieties), the heads of *Calamus rotang*, the bulbous root of *Colocasia indica*, and the smaller variety of the fruits of *Ficus glomerata*, kánji, goat's milk, and generally such things as have a bitter, astringent and pungent, taste, and the juice of the fruits of *Citrus medica*, and that variety of it which is called 'Páti,' are beneficial. Instead of taking rice twice a day, the patient should take it once during daytime, and substitute sago, barley, arrow-root, or any other light food for his evening meal. As indigestion is the chief cause of this disease, care should be taken to avoid it by abstaining from every kind of heavy food.

Such heavy food as cakes, all kinds of sweets, especially raw sugar, *Phaseolus radiatus*, curds, ghee in excessive measure, liquid food in copious quantities, and meat should be avoided. The patient abstain from sleep during day time and should not suppress the urgings of stools and urine.

CHAPTER XIII.

CHLOROSIS, ANÆMIA, AND JAUNDICE.

EXCESSIVE physical exercise, excessive indulgence in sexual pleasure, eating in copious measure food that is sour or saline, excessive indulgence in wines and spirits, too much use of chillies, and pepper, and mustard, and other articles of keen virtues, and the use of burnt earth as food, lead to an excitement of all the faults which in, their turn, vitiate the blood and lead to these diseases. Before the appearance of chlorosis, the skin becomes cracked, the mouth frequently waters, the whole body becomes languid, a desire is felt for eating earth, the eye-balls become swollen, stools and urine become yellow, and indigestion manifest itself. There are five kinds of chlorosis, *viz.*, wind-born bile-born, and phlegm-born, that born of all the three faults, and that born of eating earth.

In the wind-born variety of this disease, the skin, urine, Wind-born, bile-born, eyes, and nails become either red or and phlegm-born varieties. black, and dry. Tremours of the body, pains like those caused by one's being pricked by a thousand needles, suppression of urine, delusions, etc., are also seen. In the bile-born variety, the whole body, especially the stools, urine, and nails, become yellow. Besides these, a

burning sensation, thirst and fever, are the other symptoms. The stools consist of scybalæ. In that variety of the disease which is due to phlegm, the skin, urine, eyes, and face become white; watery secretions issue from the mouth and the nose. The other indications are inflammations, sleepiness, langour, and excessive heaviness of the limbs. In that variety of this disease which arises from an excitement of all the faults, all the above symptoms appear mingled with one another. If such supervening symptoms as fever, disgust for food, nausea, vomiting, thirst, langour, loss of the senses, that is, of their functions, etc, appear in the last-mentioned variety of the disease, it then becomes incurable. In chlorosis caused by eating earth, some particular fault is excited corresponding to the quality of the earth taken. Thus if the earth that is eaten has an astringent taste, the wind is excited. By eating earth that abounds in alkaline ashes, the bile becomes excited. By eating earth that is sweet, the phlegm is excited. The particular fault that is thus excited discovers its own especial symptoms as mentioned above. By eating earth that is fried or burnt, the several ingredients of the body become dry. Even the food that is eaten becomes dry in consequence of the dryness of the earth that is taken. The fried or burnt earth, before being digested, fills up and obstructs the blood-bearing ducts and thereby destroys the functions of the senses, brilliance of complexion, energy, and the *ojas* of the patient. The strength of the patient disappears and the disease becomes fully developed.

If worms are generated in the stomach of a person who is suffering under chlorosis, his eye-balls, cheeks, eye-brows, feet, naval, and genital organ show symptoms of swellings and his stools are seen to be mixed with mucus and blood.

If chlorosis be neglected for a long time, it becomes incurable. That man, again, who while suffering from this disease, with the inflammations fully developed, sees every surrounding object yellow, cannot be cured. If the stools of a person while afflicted by this disease become suppressed, or scanty, or green, or mixed with mucus, the case is regarded as hopeless.

If the body of one afflicted by this disease appears to be covered by a white film, and if pains vomiting, swoons, thirst, etc., appear as supervening symptoms, then death is certain to result. He whose body becomes white or pale through loss of blood, has very little chance of life. That person also whose teeth, nails, and eyes become pale, and who sees all objects to be pale, is certain to meet with death. Death also overtakes that patient whose arms, legs, and face become swollen but the middle portion of whose body becomes lean. Similarly, one whose arms and legs become lean but the middle portion of whose body becomes swollen, is certain to die. One whose anus, genital organ, and testicles become inflamed, and who discovers such supervening symptoms as swoons, loss of consciousness, and diarrhœa with fever, soon meets with death.

If after one has got chlorosis eats such food in excessive measure as excites the bile, then the bile, becoming exceedingly excited, vitiates the blood and the flesh. This leads to Anæmia. Enlargement of the liver also leads to this disease. Those incidents which have been spoken of as the causes of chlorosis are regarded as the causes of anæmia also.

Sleep during day time, in addition to these causes, may bring about this disease. A portion of the bilious secretions from the liver, instead of finding a way to the stomach, become mixed with the blood and produce anæmia.

In this disease the eyes, at the outset, become yellow.

Symptoms.

A little while after, the skin, nails, face, stools, urine, and the whole body become yellow like a frog in the rainy season. In some cases the urine and the stools are seen to become red. Sometimes the stools become hard and white, and an itching sensation is felt all over the body. Besides nausea, loss of the functions of the senses, burning indigestion, weakness, disgust for food, and langour are the other symptoms that manifest themselves.

If in this disease such supervening symptoms as swellings, loss of consciousness, redness of face and eyes, blackness or yellowness or redness of urine and stools, burning sensation of the body, disgust for food, thirst, suppression of the urine, sleepiness, and weakness of the digestive fire, appear in a virulent degree, the patient certainly meets with death.

If anæmia lasts for a length of time, its ordinary symptoms manifest themselves in a more vigorous form. The disease then is called 'Kumbha-kāmalā.' It is difficult of cure. If, again, such symptoms as disgust for food, nausea, fever, langour, and pains born of the excitement of the faults, difficulty of breathing, consumption, and loose motions appear, no hope can then be indulged of the patient's life.

After the appearance of chlorosis and anæmia, the body may become greenish, dark or yellow. With such change of complexion, strength and energy decrease. Sleepiness, loss of

Aggravated or malignant
Anæmia.

Jaundice.

the digestive fire, slight fever, distaste for sexual indulgence, pains all over the body, burning a sensation, thirst, disgust for food, delusions and similar other symptoms may also manifest themselves. The disease is then called jaundice.

• The treatment principally consists of doing all that is needed to restore the functions of the liver. If our 'Sarala-bhedi pills' be taken, in the measure that is desirable, every night at bed time, the patient's intestines are kept clear by one or two motions in the morning and the liver performs its functions properly. The consequence of this is that chlorosis, anæmia, and jaundice are considerably alleviated. In chlorosis, boiled (or medicated) ghee mixed with the decoction or the paste of *Circuma longa*, or with the decoction or the paste of *Phyllanthus emblica*, *Chebulic myrobalans*, and *Terminalia Bellerica*, also 'Timduka grita,' as explained in the chapter on diseases of the wind, does great good. If there is constipation or suppression of stools, such ghee should be administered with drugs having purgative virtues. In chlorosis due to vitiated wind, the decoction of what is called the tripple fruit mixed with ghee and sugar, should be given. In chlorosis caused by vitiated bile, *Convolvulus turpethum*, reduced to pulv, and mixed with sugar, should be administered. The measure of the former should be about 10 mashes; of the latter, it should be about 2 tolas and 5 mashes. In chlorosis brought about by vitiated phlegm, the patient should take *Chebulic myrobalans* soaked in cow's urine and then reduced to powder and once more mixed with cow's urine. The other medicincs that may be administered in phlegm-born chlorosis are pulv ginger of the measure of 8 mashes and ashes of iron 1 masha, mixed with cow's urine; *Piper longum* reduced to powder, and of the measure of 4 mashas, and pulv ginger of the

measure of 4 mashas, mixed with cow's urine ; and corrected 'Çilājatu,' of the measure of 3 mashas, mixed with cow's urine. Sometimes *Balsamodendrum mukul*, cooked in ghee and of the measure of 8 mashas is given with good results. It is seen that iron pulv, subjected to the process called 'Bhāvanā,' in cow's urine, for 7 days, and administered with milk, produces very beneficial results in phlegm-born chlorosis.

If *Chebolic myrobolans* be taken every day, with raw sugar, beneficial results follow in all cases of chlorosis. Iron, black sesame seeds, dry ginger, *Piper longum*, black pepper, the pith of jujube seeds, all these should be reduced to powder ; take equal measure of each ; ascertain the weight of the total and then mix it with as much of 'Svarnamākshika' (Iron Pyrites). Form boluses of this, with a little honey. These boluses should be administered with a little whey. Beneficial results are produced by this medicine in even difficult cases of chlorosis. There is another remedy for swellings in chlorosis. Take a Mandura, heat it seven times in a fire and cool it as many time by dipping it in cow's urine. Reducing to pulv the Mandura thus corrected, mix the pulv with ghee and honey. A little quantity should be taken every day with cooked rice. This cures not only the swelling but the chlorosis itself by increasing the power of digestion.

In Kāmalā the leaves of *Tinospora cordifolia*, pounded with whey, should be given to the patient to drink in a liquid form. Milk may be given with dry ginger powder. Turmeric reduced to pulv, of the measure of 1 tola, mixed with curds, should

Treatment of swellings
in chlorosis.

Treatment of Kāmalā.

be taken in the morning, The decoction of the three myrobalans, *Tinospora cordifolia*, *Berberis asiatica*, and the expressed juice of the bark of *Melia Azadirachta*, mixed with honey, may also be taken every morning with advantage. Iron, dry ginger, *Piper longum*, pepper, and *Embelia Ribes*, reduced to powder, or turmeric, *Phyllanthus Emblica*, Chebulic myrobalans, and *Terminalia Bellerica*, reduced to powder, proves beneficial. The pulv of iron subjected a thousand or five hundred times to the process called puta, with honey and ghee, forms another good medicine. The patient may also be given iron thus corrected and reduced to pulv, mixed with Chebulic myrobalans and turmeric both reduced to powder, and ghee and honey. The paste thus prepared should be licked now and then. Iron pulv with the fruit of *Phyllanthus Emblica*, dry ginger, *Piper longum*, black pepper, and turmeric, all reduced to powder, and mixed with ghee, honey, and sugar, alleviates Kámalá.

The treatment followed in ordinary chlorosis and anæmia is laid down for also malignant anæmia and malignant jaundice. In malignant anæmia, burning a 'mandura'* eight times in a fire made of the wood of *Terminalia Bellerica*, and dipping it eight times in cow's urine, and then reducing it to powder, give the powder, mixing it with honey, to the patient to lick. In malignant jaundice, the patient should lick iron pulv mixed with the decoction of cetechu and the tubers of *Cyperus rotundus* reduced to powder. Malignant jaundice is considerably relieved by the following medicine: reduce each of these, viz., *Picrorhiza Kurroa*, *Sida cordifolia*, liquorice, Emblic myrobalans, Chebulic myrobalans, Belleric myrobalans, turmeric, and *Berberis asiaticus*, to fine powder. Take equal

* When iron is melted, the impurities that come out are called 'Mandura.'

measures of each powder and mix them together with ghee, honey, and sugar. This preparation should now and then be licked by the patient. Besides these, the following well-known medicines, *viz.*, 'Phalatrikádi kasháyá,' 'Vásádi kasháyá,' 'Nabáyasa lauha,' 'Trikatrayádyā lauha,' 'Dhātri lauha,' 'Ashtādaçāṅga lauha,' 'Punarnabádi mandura,' 'Pāndu-panchānana rasa,' 'Haridrādyā ghrita,' 'Vyoshādyā ghrita,' and 'Punarnabā taila," should, with discretion, be used in cases of chlorosis, anæmia, and jaundice of every form.

For curing the yellowness of the eyes, the juice of the leaves of *Leucas linifolia* (syn. *Phlomis seylanica*,) may be used. The juice should be applied to the eyes once or twice every day. Or, the powder of turmeric, red chalk, and Emblic myrobalans, mixed with honey, may be used as a collyrium. The natural colour of the eye may also be brought back by the patient snuffing the juice of the roots of *Momordica mixta* or of the leaves of *Aloe Indica* (syn. *Aloe perfoliata*). The liquified paste of the fruit of *Luffa amara* of the yellow variety, obtained by rubbing them in water (on a stone), if snuffed, produces equally beneficial results.

The observations about diet and forbidden practices, that
 Diet, &c. apply to mature fever and derangements
 of the liver, hold good with respect
 to chlorosis, anæmia, and jaundice. No food or drink of
 stimulating properties should be taken.

HEMORRHAGE OR 'RAKTA-PITTA' .

Exposure to the heat of fire or the sun, physical exercise, grief, continuous sauntering and travelling on foot, sexual indulgence, and eating in large measure such articles of keen virtues as pepper, or such articles as abound in alkaline ashes, or things which are of a pungent taste, excite the bile and produce hemorrhages. As regards women, they are apt to catch this disease when their menstrual flow ceases. Generally, the bloody discharges take place from the mouth, the nose, the eyes, and the ears, among the outlets of the upper part of the body, and the anus and the generative organs, among the outlets of the lower part of the body. If the disease takes a severe form, discharges may take place from even the pores of the body.

Before the disease is developed, the incubatory symptoms are a languor or debility of the whole body, a desire for cool drinks and food, vapoury exhalations from the throat, vomiting, and the smell of blood or iron in the breath. After the development of the disease other symptoms manifest themselves agreeably to the particular fault that is more excited than the others. If the wind be more excited than the bile or the phlegm, the blood that is discharged becomes either dark or red, frothy, thin, and dry. Besides, the discharges take place from the anus and the genital organs. If the bile be excited, the blood takes the colour of the decoction of the group of barks beginning with that of the banian ; or, it may be dark, or of the colour of cow's urine, or of a shining dark hue, or of the hue of soot, or of that of galena or sulphide of lead. If there is predominance

• Causes.

Incubatory and premortary symptoms agreeably to the fault excited.

of phlegm, the blood that is discharged becomes thick, slightly pale and oily, and slimy. The discharges take place from such outlets in the upper part of the body as the mouth, the nose, the eyes, and the ears. If two or more faults be excited together, the symptoms of each present themselves in a combined form. In that form of the disease in which the wind and the phlegm are excited together, bloody discharges take place simultaneously from the upper and the lower outlets of the body.

Amongst those forms of the disease that in which the
 bloody discharges take place from only
 the upper outlets of the body, such as
 the mouth, the nose, and the ears, is
 regarded as easily curable if the force of the discharge be
 mild, if there be no supervening symptoms, and if the disease
 manifests itself in the autumn or the winter season. That
 form of the disease in which the discharges take place from
 the lower outlets of the body, and which is born of the excite-
 ment of two faults, is suppressible. That form of the disease,
 however, in which the discharges take place from both the
 upper and the lower outlets of the body, and which is born
 of the excitement of all the three faults, is incurable. If
 the patient be of advanced years, or of weakened digestive fire,
 or without the capacity to eat, or afflicted with other ail-
 ments, the disease becomes incurable.

The supervening symptoms of this disease are weakness,
 hard breathing, cough, fever, vomiting,
 a sense of inebriation, paleness of
 the body, burning sensation of the skin, swoons, acidity, rest-
 lessness, pains in the chest, loose purging, pain in the head,
 a fetid smell in the body, disgust for food, and a fetid smell
 in the blood. The blood assumes the colour of water in which

meat has been washed, or of clay, or of the adeps, or pus, or the liver, or the ripe fruit of *Eugenia Jambolana*. It may even be of a diversified hue like the rain-bow. If these supervening symptoms appear, the case becomes serious and ends fatally. Death also ensues if the eyes of the patient become blood-red in hue, or if the patient sees his own vomit to be red, or if he sees all objects to be of that colour, or if he vomits a large quantity of blood.

If, when this disease has set in, the patient be found to retain strength, the discharge of blood should not be suddenly checked, for if the vitiated blood be allowed to remain in the body, it may produce many diseases such as chlorosis, anæmia, jaundice, diseases of the lungs and the chest, Crani, enlargement of the spleen, abdominal tumours, fever, &c. If the patient, however, be weak, or if the copiousness of the discharge endangers life, it should then be checked without loss of time. The expressed juice of *Panicum Dactylon*, or that of pomegranate flowers, or that of cowdung or horse-dung, administered with sugar, promptly checks discharges of blood. The other remedies for speedily checking these discharges are the expressed juice of the leaves of *Justicia Adhatoda*, of the leaves of *Eupatorium Ayapan*, and of the fruits of *Ficus Glomerata*, and the infusion of shell-lac. By administering alum of the measure of one anna with cow's milk, the discharges may be very speedily checked. The remedies mentioned for checking bloody stools and the discharge of blood in piles, may, with discretion, be administered in this disease. If the discharge takes place through the nose, it may be stopped by applying a plaster on the head made of the fruit of *Phyllanthus Emblica* fried in ghee and reduced to a paste with a sufficient quantity of kânji. The

Treatment according to the condition of the patient.

following are some excellent medicines for stopping discharges from the nose : milk, or water, or the expressed juice of *Panicum Dactylon*, or of pomegranate flowers, mixed with sugar ; the expressed juice of *Mucuna pruriens*, of onions, of cowdung and horsedung, and the infusion of shell-lac and Chebulic myrobalans ; these should be snuffed by the patient. If the discharge takes place from the ears, the same medicines should be administered. For checking discharges from the urethra, the medicine prescribable is this : take 2 tolas of the roots of *Saccharum spontaneum*, *Saccharum Sara*, black sugar cane, and *Saccharum cylindricum* ; boil the roots in 16 tolas of goat's milk, mixed with 1 seer of water, till 16 tolas are left ; this should be given to the patient to drink. Milk boiled with the roots of *Asparagus racemosus* and *Tribulus lanuginosus*, or with *Hedysarum gangeticum*, *Doodia lagopodioides*, *Phaseolus trilobus*, and *Teramus labialis* (syn. *Glycine debilis*), forms another remedy. If the discharge takes place from the genital organ of a female, these medicines, as also all those which are laid down in the chapter on Dismenorrhœa and Menorrhagia, should be administered with discretion. Discharges from the anus, urethra, and the genital organ of females, can be promptly checked by the following medicine : take 2 tolas of *Pterocarpus santalinus*, dried fruit of *Ægl. marmelos*, *Aconitum heterophyllum*, the bark of *Holarrhena antidysenterica*, and the gum of *Acacia Arabica* ; boil these in 16 tolas of goat's milk, mixed with 1 seer of water, till only 16 tolas remain. This liquid should be given to the patient to drink. Another good medicine for checking discharges from the mouth, the nose, the anus, the urethra, and the genital organ of females, consists of these ingredients : dried grapes (*uvæ passæ*), *Pterocarpus santalinus*, *Symplocos racemosa*, and *Aglaia Roxburghiana*,

should be reduced to pulv or paste. This should be taken, mixed with the juice of *Justicia Adhatoda*, and honey. If the blood discharged consists of clots, a small quantity of pigeon's dung, rubbed with honey, should be administered. Besides these, the cold infusion of the group of drugs beginning with *Coriandrum sativum*, the decoction of the group beginning with *Pavonia odorata*, the decoction of the group beginning with *Justicia Adhatoda*, pills made of the group beginning with *Élettaria cardamomum*, 'Kushmándakhandā' 'Vásákushmándā,' 'Khandakádyā-lauha' 'Raktapittántakalauha', 'Vásá-ghrita', 'Saptaprastha-ghrita', and 'Hriverádyataila', should be administered with discretion.

If fever appears with hemorrhage, the following medicine becomes very efficacious, for it cures both fever and hemorrhage. Reduce each of these into pulv, viz., *Convolvulus Turpethum* of the red variety, the same of the dark variety, Emblic, Chebulic, and Belleric myrobalans, and *Piper longum*. Take equal measures of these, and mix them together with double the quantity of sugar and honey. Boluses made of the paste thus formed should be administered. Besides this, the physician may administer separately, such medicines as alleviate hemorrhage and such as alleviate fever, that is, one after another, or in a combined state. If such diseases as asthma, cough, total suppression or hoarseness of voice, and others of a like nature supervene, the treatment should then be like that of phthisis. It is generally seen that the juice of the leaves of *Pinus webbiana*, and honey, alleviates asthma, cough, and suppression or hoarseness of voice.

In cases of hemorrhage from the upper outlets, the patient should fast, if no diminution is noticed in his strength, flesh, and digestive power.

Diet.

If a diminution is observed in these, nutritive and agreeable food should then be prescribed. Boluses of fried paddy reduced to powder, and mixed with ghee and honey, may be given. The decoction, cooled, of the date fruit, *wæ passæ*, liquorice, and the fruit of *Grewia asiatica*, should be given to the patient to drink, mixed with sugar. In cases of hemorrhage from the lower outlets, the patient should be given cooling drinks. The decoction of the smaller group of the five roots, *Hedysarum gangeticum*, *Doodia lagopodioides*, *Solanum Indicum*, *Solanum Xanthocarpum*, and *Tribulus lanuginosus*, corrected by sugar and other ingredients, promptly alleviates hemorrhage from the lower outlets. If the discharges be checked, that is, if their copiousness be reduced, and if the patient's digestion is not impaired, old rice may be given of the finer varieties, with the soup of such pulses as *Phaseolus Mungo*, *Cicer lens*, and *Cicer arietinum*. The soup of lobsters of the larger variety, or, of eels, and such vegetables as *Trichosanthes dioica*, *Ficus Glomerata* of the smaller variety, plantain flowers, ripe *Cucurbita Pepo*, *Colocasia Indica*, the solid stem of plantain plants, and *Momordica charantia* of the smaller variety, are also prescribable. *Gratiola monniera* (Bráhmī-sáka), the soup of the meat of kids, deer, hares, doves, pigeons, the smaller variety of cranes, goat's milk, date fruit, pomegranates, the fruit of *Trapa bispinosa*, *wæ passæ*, the fruit of *Phyllanthus Emblica*, the soft seeds of the unripe fruit of *Borassus flabelliformis* (Tála), sugarcandy, unripe cocoa-nuts, the oil of *Sesamum Indicum*, and curries made with ghee (instead of mustard oil), may also be given. The evening meals should consist of chupatties made of wheat or barley flour, or fried cakes (puris) of the same, and the aforesaid curries. Food prepared with the kind of wheat-flour called 'Suji' or powdered gram or chick-pea, ghee, and

anything that is not excessively sweet, may be given. The patient should drink boiled water properly cooled.

All food that is heavy and difficult of digestion, or that is
 • of keen virtues, or that is dry, curds,
 Forbidden food and practices. fish, anything that purges the bowels,
 mustard oil, chillies, salt in excessive
 measure, the variety of *dolichos* known especially as 'simbi',
 potatoes, pot-herbs, sour articles, the soup of *Phaseolus*
radiatus, and betel leaves with areca nuts and spices, should
 be abstained from. The patient should never suppress the
 urgings of stools and urine. He should never use tooth-sticks
 for cleaning his teeth. He should avoid physical exercises,
 journeys on foot, smoking, exposure to dust and heat of the
 sun, exposure to the cold night air, night-keeping, bathing in
 in tanks and rivers, and singing or shouting. Sexual indulgence
 also, and riding, are forbidden. These are especially baneful to
 a person suffering under this disease. If the patient wishes
 to bathe, he may use boiled water sufficiently cooled.

PHTHISIS, ULCERATION OF THE LUNGS, AND CONSUMPTION.

Suppression of the urgings of stools and urine, excessive
 fasting, and similar other acts which
 Causes of the disease. lead to a waste of the ingredients of
 the body, wrestling with a stronger person, irregular meals,
 such as eating one day sparingly and gorging another day,
 or eating at irregular hours, and similar other practices,
 produce this disease. If hemorrhage be suffered to remain a
 long while without proper treatment, it is seen to bring about
 phthisis and consumption. When all the three faults, *viz.*, wind,
 bile, and phlegm, becoming excited, obstruct the juice-bearing
 ducts, the result is the gradual decay or waste of blood,

flesh, adeps, bones, marrow, and semen. The fact is, the juices nourish the ingredients of the body. When, therefore, the juices are obstructed, the ingredients of the body fail to receive nourishment. The consequence is decay and waste. Again, when through excessive sexual indulgence, the semen becomes exhausted, the other ingredients, in their attempt to repair the exhaustion, become themselves weakened and wasted. This waste and decay of the ingredients of the body is called consumption or phthisis.

Before the appearance of this disease, difficulty of breathing, or asthma, pain in every part of the body, secretion of phlegm, 'dryness of the palate, vomiting, weakness of the digestive fire, a sense of inebriation, inflammation of the schneiderian membrane with loss of the sense of smell, whiteness of the eyes, a hankering after meat and sexual indulgence, &c, manifest themselves. The patient generally dreams, during sleep, of being attacked by insects and birds and beasts of prey, or as standing on heaps of hair, ashes, and bones, or as seeing lakes and tanks wholly dried up. He also dreams of falling down from mountains, and of meteors and luminous bodies dropping down from the firmament.

When the disease is developed, the symptoms that manifest themselves are catarrh or cold in the nose, cough, hoarseness of voice, disgust for food, contraction and pains in the sides, headaches, fever, excessive heat in the shoulders, debility of the body, vomiting of blood, and purging. Amongst these, hoarseness of voice, and contraction and pain in the sides and shoulders, are due to excited wind; fever, heat of the body, purging, and discharge of blood, to excited bile; headaches, disgust for food, cough catarrh or cold in the

nose, and debility of the whole body, are due to excited phlegm. The particular fault which becomes more excited than the others, discovers its own symptoms in a more marked degree.

Phthisis is naturally extremely difficult to cure. If the patient's strength and flesh be not seen to waste, then cure may be hoped for even after the appearance of catarrh in the nose and the ten other symptoms. If, however, strength and flesh be seen to have diminished, then the disease becomes incurable, even if only six out of the eleven symptoms, *viz.*, cough, purging or diarrhoea, pains in the sides, hoarseness of voice, disgust for food, and fever, or only three, *viz.*, asthma or difficulty of breath, cough, and vomiting of blood, appear.

If the patient, notwithstanding copious food, begins to decline in strength and flesh, or if diarrhoea supervenes, or if swelling appears in the testicles and the abdomen, the disease is looked upon as incurable. If any of these symptoms appears, *viz.*, excessive whiteness of the eyes, disgust for food, difficulty of breathing, and copious discharge of semen attended with great pain, it is regarded fatal.

The bearing of heavy weights, wrestling with stronger men, falls from high places, forcibly restraining kine, horses, and other strong animals while they are running, hurling at a distance heavy stones and other substances, running far for a great distance at a stretch, reciting or reading with a loud voice, swimming for some length of time, jumping and other exercises of strength, and excessive indulgence in sexual pleasure, lead to ulceration of the lungs. Eating

Curability or otherwise
of the disease.

Fatal symptoms.

Causes of ulceration
of the lungs.

excessively one day and sparingly the next, is another cause of the disease.

The patient feels as if his chest has been pierced through
 and through, or broken into pieces
 Symptoms.

Pains in the sides, with tremours, and gradual decrease of strength and flesh, appear. A diminution soon takes place of energy, complexion, appetite, and digestive power. Fever, pain, cheerlessness, and purging, manifest themselves. Cough appears, with expectorations of phlegm that are of a foul scent, dark or yellow in colour, clotty, and mixed with blood. In consequence of the excessive expectoration of phlegm and discharge of blood through the mouth, the vital seed and the *ojas* of the patient decrease. The disease is regarded as a form of phthisis. As long as all the symptoms of the disease do not appear, and as long as the patient's strength and complexion remain unchanged, the disease is regarded curable. Upon the appearance, however, of all the symptoms, it becomes incurable and fatal.

From ulceration of the lungs and excessive indulgence
 Symptoms of the disease in sexual pleasure, grief, hard physical
 called Waste or Consumption. exercises, and journeys on foot, and
 similar other causes, the vital seed, *ojas*, strength, complexion, &c, begin to waste. This disease is known as waste or consumption. Its treatment is the same as that of phthisis.

Phthisis is exceedingly difficult to treat. It is always
 necessary to keep up the patient's
 Treatment.. strength and check purging. Purgatives, therefore, should never be administered in this disease. If, however, constipation of the bowels sets in, the mildest purgatives should be used. Goat's meat, goat's milk, the ghee of goat's milk with sugar, the companionship of goats

and deer while the patient is sitting or lying, is especially beneficial in phthisis. If the patient becomes thin, fresh butter should be given with sugar and honey. If there is pain in the head, or shoulders, or the sides, hot plasters should be applied of dill seeds, liquorice, the bark of *Aplotaxis auriculata*, that of *Tabernæmontana coronaria*, and white sandal wood. The pains are considerably alleviated by them. Other plasters may be applied with benefit. They are 1. *Sida cordifolia*, *Vanda Roxburghii* (syn. *Cymbidium tesseloides*), sesame seeds, liquorice, wild indigo, and ghee ; 2. *Balsamodendron Mukul*, *Cedrus deodara*, white sandal, *Mesua ferrea*, and ghee ; 3. Kshirakáli (a root brought from Nepal), *Sida cordifolia*, *Convolvulus paniculatus*, the red powder called Elabáluká, and *Berhavia diffusa* ; and 4. ~~*Asparagus racemosus*~~, Kshirakáli, *Andropogon sekuenanthus*, liquorice, and ghee. For checking the vomiting of blood, lac-dye water, 2 tolas, with half a tola of honey, or 2 tolas of the juice of *Eupatorium Ayapan* or of the plant called Kuksimá, may be administered. Those remedies, again, which have been spoken of as capable of checking hemorrhage may be applied for checking the vomiting of blood in phthisis if they do not affect the fever improperly. For alleviating pains in the sides, fever, asthma, and inflammation of the schneiderian membrane, the decoction should be given of the following drugs, viz., coriander seeds, the fruit of *Piper longum*, dried ginger, *Hedysarum gargeicum*, *Doodia lagopodioides*, *Solanum xanthocarpum*, *Solanum Indicum*, *Tribulus lanuginosus*, the bark of *Ægle marmelos*, of *Colosanthus Indica*, of *Gmelina arborea*, of *Bignonia suaveolens*, and of *Premna serratifolia*. The remedies respectively laid down for fever, cough, hoarseness of voice, and hemorrhage, may be administered, with discretion, separately or together, in

this disease, agreeably to the symptoms manifested. Besides these, the medicines known as 'Lavangádi-churna,' 'Sitopaládi-leha,' 'Vrihadváśava-leha,' 'Chyavanaprāṇa,' 'Drākshārishta,' 'Vrihat-chandrámrta-rasa,' 'Kshayakeṇari,' 'Mrigānkā-rasa,' 'Mahāmrigānkā-rasa,' 'Rājamrigānkā-rasa,' 'Kānchanābhra-rasa,' 'Vrihat-Kānchanābhra-rasa,' 'Rasendra-gudikā,' 'Vrihat-rasendra-gudikā,' 'Hemagarbhapottali-rasa,' 'Sarvāngasundara-rasa,' 'Ajāpanchanka-ghrita,' 'Balāgarbha-ghrita,' 'Jivantyādyā-ghrita, and 'Mahāchandanađi-taila,' are some of the most efficacious remedies prescribable in this disease. Our own 'Vāsakārishta' promptly alleviates such supervening symptoms as cough, asthma, and pains in the chest. As long as the vomiting of blood is not checked, no medicine should be given that contains musk. As long as fever lasts, no ghee or oil should be administered.

Treatment of ulceration
of the lungs. In ulceration of the lungs all these remedies should be administered with discretion. In consumption, that particular ingredient or ingredients of the body which has or have undergone waste, should be sought to be restored to its or their normal measure by administering the particular remedy required. Such medicines as 'Amritaprāsa,' 'çwadangshtrādi-ghrita,' &c., which have nourishing virtues, often prove very beneficial.

If the digestion of the patient be not impaired, he may take during the day old and fine rice, the soup of *Phaseolus Mungo*, the flesh of goat, deer, pigeon, and of such animals as live upon other animals. Among vegetables, *Trichosanthes dioica*, brinjals, *Ficus glomerata* of the smaller variety, plantain flowers, cods of *Moringa pterygosperma*, ripe fruit of *Cucurbita pepo* of the country variety, &c., may be given. The curries should

be cooked with ghee and rock-salt. The evening meal may consist of chupaties made of either wheat or barley flour, wheat flour fried in ghee and boiled in milk and water, with sugar. If the phlegm be excited, then rice should not be given. Instead, chupaties of wheat flour are prescribable. If the digestive fire be weak, rice or chupaties of wheat flour during the day, and sago, arrow-root, or barley after evening. If rice or chupaties cannot be digested, sago, &c., should be substituted during day time also. In this condition of the patient, the following preparation forms an excellent food : take 2 tolas of barley, and 2 tolas of *Dolichos biflorus*, 8 tolas of goat's meat ; boil these in 96 tolas of water till 24 tolas remain ; strain the liquid properly and then fry it in 2 tolas of ghee ; cook it next with a small measure of assafoedita, the fruit of *Piper longum* reduced to pulv, and pulv ginger also. After the cooking is over, it should be given to the patient to drink, with a small measure of the juice of pomegranate. It is very nourishing. Boiled water, cooled, should be drunk. The patient should always keep his body covered.

Forbidden diet and practices.

Exposure to cold, and the heat of the sun, night-keeping, singing, shouting, riding on horse-back or in carriages, sexual indulgence, suppressing the urgings of stools and urine. journeys on foot, all acts involving tiresome labour, smoking, bathing, fish, curds, and food made pungent with chillies, the variety of dolichos called 'simbi,' radishes, potatoes, *Phaseolus radiatus*, pot-herbs, too much assafoedita, onions, garlies, &c., are forbidden. In this disease indulgence in sexual pleasure or loss of the vital seed is very baneful. One should, while afflicted by this disease, avoid every opportunity that may lead to sexual excitement

BRONCHITIS.

The admission of smoke or dust into the mouth or the throat and the nostrils, the upward course of undigested juices through the action of the excited wind, the admission of particles of food into the windpipe owing to quickness of eating, suppression of the urgings of stools and urine, and sneezing, and other causes, excite the wind and then the bile and the phlegm also. This leads to the disease called Bronchitis. The general symptom of the disease is the constant emission through the mouth of a sound that resembles the noise made by striking a vessel of white brass with a stick. ~~Before the~~ appearance of the disease, the patient feels his mouth and throat afflicted as if by the thorny ends of a large number of grains of barley. There is itching in the throat, and the patient feels pain in swallowing. This disease is classed under five heads : 1. Wind-born, 2. Bile-born, 3. Phlegm-born, 4. that which is born of the ulceration of the lungs, and 5. that which is born of consumption or gradual waste of the system. Another variety of the disease is born of old age and decrepitude, but in consequence of some one of the faults being more excited than the other two, it falls within one of the three varieties mentioned first.

In the Wind-born variety, piercing pains are felt in the chest, forehead, sides, stomach, and head. The mouth becomes dry ; the strength becomes reduced ; there is a constant urging to cough ; hoarseness of the voice and a dry cough not followed by expectoration.

Symptoms of the Wind-born, the Bile-born, and the Phlegm-born varieties.

torations of phlegm. In the Bile-born variety there is a burning sensation in the chest. The other symptoms are fever, dryness of the mouth, a bitter taste in the mouth, thirst, vomiting, the matter thrown out being generally yellow and of a pungent taste. The complexion becomes pale, and there is burning pain in the throat while coughing. In the Phlegm-born variety the mouth of the patient is always filled with phlegm. The body becomes languid. The other symptoms are head-ache, disgust for food, heaviness of all the limbs, itching, a constant urging to cough, and expectoration of thick, phlegmonous matter while coughing. The whole body seems to be full of phlegmonous matter.

Those causes which have been mentioned as leading to ulceration of the lungs generate Bronchitis with ulceration. In this disease, at first a dry cough appears that is unaccompanied by phlegmonous expectorations of any kind. Subsequently, in consequence of the straining on the ulcerated lungs, discharges of blood take place, followed by severe pain in the throat. The patient feels his chest as if it were broken and pierced with a thousand needles. The pain, indeed, is sometimes intolerable. There is pain in the sides and joints. Fever, difficulty of breathing, thirst, hoarseness of voice, and a noise like the cooing of the pigeon, at the time of coughing, also manifest themselves.

Eating such food as is detrimental, irregular meals, that is, eating excessively one day and sparingly another day or at irregular times, excessive indulgence in sexual pleasure, suppressing the urgings of stools and urine, self-condemnation for want of food, or grief for such want, vitiate the digestive fire and excite the

~~Causes and symptoms of~~
Bronchitis born of ulceration of the lungs.

The causes and symptoms of Bronchitis brought about by consumption.

three faults. This leads to cough born of consumption. Pains in every part of the body, a burning sensation, swoons, gradual waste of the body, weakness, reduction of flesh, and expectoration of blood and pus while coughing, also manifest themselves.

Besides the above causes, cough or bronchitis frequently arises from attacks of cold. In dealing with the diseases of the nose, the causes and symptoms of nasal catarrh will be laid down. All that should be said here is that one should not neglect even an ordinary attack of cold accompanied by cough.

Cough born of ulceration of the lungs or also of con-
sumption is incurable. If the patient's strength and flesh be not reduced, and if the disease be not of a long standing, cure may be expected. The cough which arises from old age and decrepitude is incurable. By the use of proper medicines, this cough, however, may be kept in a suppressed state. Other kinds of cough are scarcely easy of treatment. Hence when the disease manifests itself, it should be attended to without loss of time.

In bronchitis born of excited wind, the following medicine proves beneficial. Make a decoction of these barks, viz., that of
Treatment. *Ægle marmelos*, *Colosanthus Indica* (syn. *Bignonia Indica*), *Gmelina arborea*, *Bignonia suaveolens*, and *Premna serratifolia*; and throw into it a small measure of the fruit of *Piper longum* reduced to powder and give it to the patient to drink. Or, take 1. *Circuma Zerrumbet*, *Rhus succedanea*, *Piper longum*, *Siphonanthus Indica*, *Cyperus rotundus*, *Hedysarum Alhagi*, and old treacle, or 2. *Siphonanthus Indica*,

Cricuma Zerumbet, *Rhus succedanea*, *Piper longum*, pulv ginger, and old treacle ; mix each of these with the oil of sesame seeds. Either of these, if licked, would prove beneficial. In bronchitis born of excited bile, the decoction of *Solanum Indicum*, *Solanum Xanthocarpum*, *uvæ passæ*, *Justicia Adhatoda*, comphor, *Pavonia odorata*, pulv ginger, *Piper longum*, mixed with honey or sugar, should be given. Another medicine consists of the decoction of *Solanum Indicum*, *Pavonia odorata*, *Solanum Xanthocarpum*, *Justicia Adhatoda*, and *uvæ passæ*, mixed with sugar or honey. By licking lotus seeds reduced to powder and mixed with honey, one suffering from bile-born bronchitis may derive much benefit. In bronchitis born of excited phlegm, the patient should take milk boiled with the decoction of the fruit of *Piper longum*, the roots of the same, *Chavica officinarum*, the roots of *Plumbago Zeylanica*, and dry ginger. This medicated milk relieves cough, asthma, and fever, besides increasing strength and the digestive fire. The decoction of *Aplotaxis auriculatus*, *Myrica sapida*, *Siphonanthus Indica*, dry ginger, and the fruit of *Piper longum*, alleviates cough, asthma, and complaints of the chest. The juice of ginger mixed with honey similarly relieves cough and asthma. The decoction of the ten roots, mixed with the fruit of *Piper longum* reduced to powder, alleviates bronchitis born of excited phlegm, asthma, fever, and pains in the sides. In cough born of ulceration of the lungs, the following medicine, if licked, does great good : take sugarcane, that variety of the same known as 'Ikshuváliká', the fragrant wood called 'Padmakáshta', lotus-stalks, 'Nilasundi', white sandal wood, liquorice, *Piper longum*, grapes, shell-lac, *Rhus succedanea*, and *Asparagus racemosus* in equal measures. Add 'Vangsarochana' (the siliceous concretion found in the

joints of the female bamboo), equal to double the measure of any of these. Lastly, add sugar equal to four times of the total weight or measure. Mixing them together, add a little honey. In cough born of consumption the patient should lick the following preparation: the bark, reduced to powder, of *Pentaptera Arjuna*, subjected to the process called 'Bhāvanā' with the juice of the leaves of *Justicia Adhatoda*, and then mixed with honey, ghee, and sugar-candy.

All kinds of bronchitis may be relieved by the patient licking the following preparation, viz., the decoction of *Solanum Xanthocarpum* mixed with the fruit of *Piper longum* reduced to powder, or *Solanum Xanthocarpum* and *Piper longum* both reduced to powder. With each should be mixed honey of equal measure. The fruit of *Terminalia Bellerica*, soaked in ghee, and inserted within a case of cowdung, and burnt in a slow fire according to the process called 'Putapāka', if kept in the mouth, relieves all kinds of cough. Take some leaves of *Justicia Adhatoda* ; enclose them in a plantain leaf and then insert them in a case made of soft clay. Burn it in a slow fire. The juice of the leaves thus burnt, mixed with the fruit, reduced to powder, of *Piper longum*, and honey, forms a good medicine for bronchitis of every description. The decoction also of the bark of *Justicia Adhatoda*, mixed with the fruit, reduced to powder, of *Piper longum* and honey, is another efficacious remedy. By taking the decoction of liquorice, bronchitis at the first stage, when it is not violent, is promptly relieved. The *Pāchana* of the group beginning with *Myrica Sapida*, the powder of the drugs beginning with pepper, 'Samasarkara-churna', 'Vāsāvaleha', 'Tālisādyā modaka', 'Chandrāmrita-rasa',

'Kásakuthára-rasa,' 'Vrihatrasendra-gudiká,' 'çringarávaleha,' 'Vrihat çringarávaleha,' 'Sárbabhuma-rasa,' 'Kásalakshmi-vilása,' 'Samasarkara-lauha,' 'Vasantatilaka-rasa,' 'Vrihat kantakári-ghrita,' 'Daçamuládyā-ghrita,' 'Daçamula-shatpa-laka-ghrita,' 'Chandanádyā-taila,' and 'Vrihat chandanádyā-taila,' are well known medicines of this disease. By applying these remedies with discretion, according to the condition of the patient, the most beneficial results are obtained. It may be added that by using our preparation known by the name of 'Vásakárista,' the most difficult cases of bronchitis may be checked and cured within a few days.

The observations which occur in the chapters on Hemorrhage and Phthisis about diet and Diet. forbidden practices apply to this disease as well. In the first stage, soup made of such fishes as *Kai*, *Mágura*, &c., and those which are classed as "small," sugarcandy, ginger, and the berries and leaves of *Solanum nigrum*, may be taken.

HICCUP AND ASTHMA.

Eating such food as is not digested within proper time
and as lies within the stomach in an
unchanged and paralysed state, or
such food as produces a burning sensation in the chest and
the throat, or such food as is heavy and rich, or dry, or
provocative of phlegm, or food that is cold, residence in a
cold place, the admission of smoke and dust into the nose,
exposure to the heat of the sun or strong winds, such
physical exercises as cause pain in the chest, bearing heavy
loads, long and fatiguing walks, suppression of the urgings
of stools and urine, fasts, and all such practices as make the
constitution dry, lead to these diseases.

The general symptom of hiccup is that the two life-
braths, Prāna and Udāna, becoming excited, repeatedly go upwards, in consequence of which eructations occur, making the sound 'hic', 'hic', 'hic,' to the great inconvenience and discomfort of the patient. Before the manifestation of this disease, that is, during its incubatory stage, the patient feels a sensation of heaviness in the throat and the chest, an astringent taste in the mouth, and a low rumbling noise in the lower part of the belly.. Hiccup is of five varieties, viz.,—1. hiccup born of food, 2. 'yamala' or double hiccup, 3. light hiccup, 4. grave hiccup, and 5. severe hiccup. That hiccup which arises from a sudden excitement of the wind due to irregularity of food and drink in respect both of quantity and time, is called food-born hiccup. That hiccup in which the eructations are double and appear at intervals,

Symptoms and varieties
of hiccup.

causing the head and the throat to tremble, is called 'yamala' or double hiccup. That hiccup which arises without much force and at intervals from that part where lungs and the chest meet, is classed as light. The hiccup which arises from the region of the navel and comes up with a deep sound, and which is accompanied by thirst, fever, and other painful symptoms, is called grave hiccup. That hiccup which is incessant, and which causes the whole body to tremble, and which is accompanied by severe and piercing pains in the rectum, the heart, the head, and other vital parts of the body, is called severe hiccup.

The last two varieties of hiccup are fatal. As regards the other varieties, those in which the

Fatal hiccup.

body is seen to dilate or contract as eructations occur, as also those in which the patient becomes weak, and averse to food, and in which the eructations become frequent, prove fatal. This disease proves fatal to those patients also in whose bodies the wind, bile, or phlegm becomes exceedingly excited, or who are advanced in years, or who are addicted to sexual indulgence. If double hiccup be accompanied by delirium, burning sensation, thirst, and swoons, it proves fatal. If, however, the patient's strength be not reduced, if his mind remains cheerful, if none of the 'dhátus' (ingredients of the body) suffers decay, if the organs of sense retain their functions unimpaired, then, whatever the variety of hiccup, it may yield to treatment.

When in consequence of the causes set forth at the outset the wind and the phlegm, becoming excited, obstruct those ducts of the body which bear the life-breaths called 'Prána' and 'Udána', and the wind itself, obstructed

Incubatory symptoms of
Asthma.

by the phlegm, is turned from its normal course and travels' in other directions, the disease called asthma becomes generated. Before the appearance of the disease, the symptoms that manifest themselves are pains in the chest, flatulence of the stomach, deep-seated pains in the abdomen, the suppression of stools and urine or scanty stools and urine, tastelessness of the mouth, and pains in the head and the forehead. Asthma also is classed under five heads. They are 1. 'Kshudra', 2. 'Tamaka', 3. 'Cchinna', 4. 'Urddha', and 5. 'Mahā'. Each of them is explained below.

In consequence of eating dry food and of undergoing tire-
 some labour, the wind in the stomach,
 becoming excited, moves upwards and
 generates the kind of asthma known
 as 'Kshudra' or mild. This is neither painful nor fatal like
 the other varieties. When the wind, remaining in the upper
 ducts of the body, increases the phlegm and becomes ob-
 structed by that phlegm, it produces that variety of asthma
 which is known by the name of 'Tamaka'. In this asthma
 pains appear in the neck and the head. Then a gurgling
 sound is emitted by the throat. The patient sees darkness all
 around. Thirst, prostration, cough followed by swoons, slight
 relief following expectorations of phlegm, a tickling sensation
 in the throat, difficulty in speaking, sleeplessness, greater
 difficulty of breathing when lying down, slight comfort while
 sitting up, pains in the sides, desire for eating and touching
 hot things, swelling of the eyes and eyelids, sweat on the
 forehead, excessive uneasiness, dryness of the mouth, heavy
 breathing, swinging of the body, &c., also appear. If with
 this variety of asthma fever and swoons appear it is called
 'Pratamaka'. In some medical treatises, this kind of asthma

The varieties of Asthma
 explained.

is called 'Santamaka'. That asthma, in which the patient is obliged to exert himself strongly for taking his breath, and in which the breath is inhaled slowly and in gradual puffs, is called 'Cchinna'. It is accompanied by great pain. A sensation of the cardiac region being torn asunder is felt. Epistaxis, constant sweat, swoons, burning sensation in the rectum, restlessness of the eyes, tears, emaciation and paleness of the body, redness of one of the eyes, anxiety, dryness of the mouth, and delirium manifest themselves. In the variety called 'Urddha', the patient cannot exhale his breath as easily as he can inhale it. The inhalation is easy but the exhalation is slow and interrupted. The patient's mouth and the ducts being obstructed by phlegm, the wind, becoming excited, causes considerable pain. The vision is directed upwards; the eyes roll, and swoons occur. Besides these, pain in the body, paleness of the face, and mental perturbation, are some of the supervening symptoms. In that asthma which is called 'Mahá', the patient's breathing resembles the deep and suppressed roars which a powerful bull makes if tied close to a post. The breathing may be heard from a distance. The patient becomes exceedingly emaciated and loses consciousness repeatedly. The eyes become restless and expanded, and the mouth becomes tasteless; stools and urine become suppressed; speech becomes feeble; and the mind also becomes enfeebled. *

* The word 'kshudra' implies small or mild. 'Tamaka' means 'pertaining to darkness.' 'Praitamaka' or 'Santamaka' means aggravated 'Tamaka'. 'Cchinna' implies interrupted. 'Urddha' is 'upwards,' and 'Mahá' (or 'Mahat') implies great or grave.

Amongst these five varieties of asthma, 'Cchinna,' 'Urddha,' and 'Mahá' are fatal. 'Tama-
Fatal varieties and symptoms of asthma. maka', if treated at the outset, may be cured; otherwise, it may be suppressed by medicaments without being entirely cured.

- In the three varieties that prove fatal, treatment should be resorted to at the outset. Cures have sometimes been effected, when the constitution of the patient has been strong.

Any medicine of heating virtue that suppresses the
Treatment of asthma. the excitement of the wind and restores it to its normal course, proves

beneficial in asthma. The application of heat to the navel and the abdominal region after rubbing them with oil, does great good in hiccup. Similar application to the chest proves beneficial in asthma. In asthma, if the patient can be made to vomit by administering emetics, relief may be expected. If, however, the patient be weak, emetics should never be resorted to. As regards emetics, the best to administer in asthma is powdered roots of *Calatropis gigantea*, of the weight of two, or two and a half, annas mixed with water.

In hiccup the administration of any of these five
Treatment of hiccup. combinations with honey proves beneficial. They are 1. the pith or kernel of the seeds of jujubes, galena, and fried paddy; 2. *Picrorrhiza kurroa*, and golden ochre; 3. *Piper longum*, *Phyllanthus Emblica*, sugar, and dry ginger; 4. sulphate of iron and pulp of wood-apple; 5. flowers and fruit of *Bignonia suave-olens*, and the head of the wild date tree. The following errhines also do much good, viz., 1. powdered liquorice, with honey; 2. powdered *Piper longum* with sugar; and 3. powdered ginger with raw sugar or molas-

ses. Two other errhines are prescribed, *viz.*, 1. the dung of the bee mixed with human milk or the thin decoction of lac ; and 2. red sandal wood rubbed with human milk. Take ginger powder of the weight of 2 tolas, goat's milk one-fourth of a seer. Boil these till the liquid that remains is reduced to the measure of the milk. This forms a good drink. The juice of that variety of *Citrus acida* which is known as Tábá, mixed with honey and 'Saindhava' salt, proves beneficial. The ashes of corals, of conch-shells, Chebulic myrobalans, Emblic myrobalans, and Belleric myrobalans, and red ochre, mixed with honey and ghee, may be given to the patient to lick. Cardamoms of the larger variety, reduced to powder. and mixed with sugar, may also be given. The juice of the bulbous root of plantain plants, mixed with sugar, may be administered as a drink, or it may simply be used as an errhine. Reducing to a paste a quantity of the larger variety of mustards called rye, dissolve it in water. When the paste has settled down, the water may be given, a small measure at a time, to drink. Black pepper reduced to powder, and mixed with sugar and honey, may be licked with beneficial results. The smoke may be inhaled of assafoetida the seeds of *Dolichos biflorus* reduced to powder, and black pepper, mixed together and thrown upon smokeless charcoal.

The intensity of asthmatic breathing may be alleviated by the patient softly drinking the smoke of the fruit, the stem, and the leaves of *Datura fastuosa* from a 'hooka.' By drenching also a piece of paper in water in which a quantity of saltpetre has been dissolved, and drying it in the sun, it should next

Modes of alleviating the intensity of asthmatic breathing.

be rolled up in the form of a cigar. The smoke of this cigar very often proves beneficial. Take also these three, *vis.*, *Cedrus deodara*, *Sida cordifolia*, and *Nardostachys jatamansi*. Reduce them to a paste and make a hollow stick of it; dry it in the sun, lave it in ghee, and let the patient drink its smoke like that of a cigar. Keeping a number of peacock plumes in a covered vessel and reducing them to ashes on a slow fire, and mixing therewith a quantity of the fruit of *Piper longum* reduced to powder, make a linctus with the aid of honey. If licked now and then, it alleviates the intensity of asthmatic breathing and violent hiccup. Either of these, *vis.*, 1. Chebulic myrobalans and powdered ginger, or 2. molasses and the ashes of barley spikes and black pepper pounded together, dissolved in hot water, does much good to the patient. After alleviating the intensity of asthmatic breathing, the following linctus may be given, *vis.*, turmeric, black pepper, *Uva passa*, old molasses, *Vanda Roxburghii*, *Piper longum*, and *Circumba Zerumbet*, reduced to powder and mixed with mustard oil. Old molasses and mustard oil may also be given with benefit. The dried kernel, reduced to powder, of old *Cucurbita Pepo*, of the measure of half a tola, dissolved in hot water, proves very beneficial in asthma and cough. The juice of ginger, with *Piper longum* reduced to powder, of the measure of 2 annas, and 'Saindhava' salt of the same measure, is another good remedy. Sulphur, purified, mixed with ghee, or sulphur and pepper reduced to powder, mixed with ghee, produces good results. The juice of the leaves of *Egle marmelos*, and of *Justica Adhatoda*, or that of the leaves of *Pladeria decussata*, mixed with mustard oil, may be given to the patient to drink. The decoction of *Tinospora cordifolia*, dry ginger, *Siphonanthus Indica*, *Solanum*

Xanthocarpum, and *Ocimum sanctum*, mixed with powdered *Piper longum*, is another medicine. The decoction of the ten roots, with powdered *Aplotaxis auriculata*, alleviates asthma, cough, and pains in the sides and chest.

• If these ordinary remedies do not alleviate the disease,

Well known remedies mentioned in medical treatises, and our own *cwásárishta*.

'Bhārgi-guda', 'Bhārgi-çarkará' 'çringi-guda-ghrita', 'Pippalādyā-lauha', 'Mahā-çwásāri-lauha', 'çwásakuthāra-rasa', 'çwāsa-bhairava-rasa', 'çwāsachintāmani' 'Hingsrādyā-ghrita', 'Vrihat-chandanādi-taila,' and 'Kanakāsava', should be administered with discretion. Our own '*cwásárishta*' is an excellent remedy in asthma. It promptly alleviates difficulty of breathing and gradually cures the disease completely.

Those kinds of food and drink and those practices which restore to the wind its normal course, are prescribable for asthma. Those aliments which have been laid down as beneficial in Hemorrhage are beneficial in this disease also. If the wind be greatly excited, water in which old tamarind pulp has been dissolved does much good. The sherbet of sugarcandy, with the juice of *Citrus medica*, and baths in river water or large tanks, are especially beneficial. If, however, there is excitement of phlegm, this should be avoided. In asthma caused by excited phlegm, the patient may keep a small quantity of tobacco leaves in his mouth and swallow at intervals a little of the juice of those leaves. Light food should be taken at night. Heavy and rich food which is difficult of digestion, food that is dry or of keen properties, curds, fish, and chillies, should be avoided. Night-keeping, excessive labour, exposure to the heat of the sun or of fire, gorging the stomach, anxieties, grief, wrath, and

everything which disturbs the peace or serenity of the mind should never be indulged in.

HOARSENESS OF VOICE.

Loud talk and exclamations, swallowing poisonous and deleterious articles, and wounds on the throat, exciting the three faults, affect the pulmonary nerves and produce either hoarseness or complete stoppage of the voice. This disease may also be produced by phthisis. There are six varieties of this disease. They are 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the three faults, 5. that born of derangements of the adeps, and 6. that born of consumption.

In the wind-born variety, the voice becomes low and issues with difficulty and resembles the bray of the ass. The stools, urine, eyes, and face become darkish. In the bile-born variety, the voice becomes keen but feeble, and the usual symptoms of excited bile manifest themselves. In the phlegm-born variety, the throat being always filled with phlegm, the voice becomes very low, and indistinct, and the patient can hardly speak without repeatedly clearing the throat. In the variety born of the excitement of all the faults, the symptoms of each of the three simple varieties present themselves in a state of union. In the variety produced by derangements of the adeps, the voice becomes very low and indistinct and issues at intervals. The patient feels thirsty almost continuously. In the

variety produced by consumption, the voice becomes exceedingly weak. When it issues from the throat, the patient feels as if it is accompanied by vapours. There is pain also while speaking. This kind of hoarseness, as also that born of the excitement of all the faults, is incurable. The disease, when it affects a weak man or one that is old, or when it is of long standing, or when it is congenital, or when it affects a person of adipose body, becomes incurable. If in that variety of the disease which is born of consumption, the voice becomes at once suppressed, death is seen to ensue.

In this disease the patient derives much benefit by
 Treatment. keeping in his mouth catechu soaked
 in oil, or the pulv of myrobalans and

Piper longum, or that of myrobalans and dry ginger. A linctus made of these, viz., *Seseli Indicum* (syn. *Cnidium diffusum*) turmeric, *Phyllanthus Emblica*, the ashes of barley spikes, and the roots of *Plumbago Zeylanica*, each reduced to powder and taken in equal measures, allays hoarseness of voice. The leaves of *Zizyphus jujuba*, reduced to a paste and then fried in ghee, prove beneficial in this disease as also in consumption. The other medicines are the linctus called 'Mriganábhyádi,' the pulv called 'Chabyádi,' the the. linctus called 'Nidigdihikádi,' 'Tryambakábhra,' Swáraswata-ghrita,' and 'Bhringarájádya-ghrita,' Besides these, some of the medicines prescribable for asthma and consumption may be prescribed in this disease.

In the wind-born variety the patient may take boiled
 Diet and forbidden practices. rice with ghee and old treacle, and
 then drink lukewarm water. In the
 bile-born variety, milk and boiled rice,
 and in the varieties born of adeps and phlegm, dry food
 and drink, are beneficial. The directions about food and

drink laid down in respect of asthma and bronchitis apply to this disease also. Those practices, again, which are forbidden in those two diseases are forbidden also in this.

DISGUST FOR FOOD.

That disease in which one cannot eat even when feeling the pangs of hunger, or in which no desire is felt for food, is called 'Arochaka'. This disease is of five varieties, *viz.*, 1. wind-born, 2. bile-born, 3. phlegm born, 4. that born of all the three faults, and 5. accidental. Sudden fear or grief, or wrath, or excessive cupidity or desire for possessing a particular thing, or the eating of such food as creates disgust, the sight of repulsive objects, the scent of fœtid or repulsive things, and similar causes generate this disease.

In the wind-born variety of this disease the patient feels an astringent taste in the mouth. His teeth become very sensitive. There is pain also in the chest. In the bile-born variety, the patient experiences a bitter or acid taste in the mouth. Sometimes there is a fœtid smell in the mouth which, besides, becomes hot to the touch. The other symptoms are thirst and a burning sensation in the skin. In the phlegm-born variety the patient feels a sweet or saline taste in the mouth which becomes slimy and cold and is aways filled with 'phlegmonous excretions. In that variety which is called accidental, no change, in respect of taste, is experienced in the mouth. yet there is a complete disgust for all kinds of food. Besides this other symp-

toms are great perturbation of mind, vertigo, stupefaction, and similar mental conditions.

In the wind-born variety, the administration of enema, in the bile born, the administration of
 •Treatment. purgatives, in the phlegm-born, the administration of emetics, and in the accidental, the use of means that restore cheerfulness of mind, constitute the general treatment of this disease. If before the midday meals one takes every day a small quantity of ginger and salt, it allays all kinds of disgust for food, strengthens the digestive fire, and keeps the throat clear. By keeping in his mouth any of the following four sets of drugs after reducing them to pulv and mixing therewith honey and mustard oil, the patient may obtain great benefit in all varieties of this disease. The four sets are 1. *Aplotaxis auriculata*, 'Sanchál' salt, cummin seeds, sugar, pepper, and 'Vit' salt; 2. *Phyllanthus Emblica*, cardamoms of the larger variety, the fragrant wood called 'Padmakáshta', the roots of *Andropogon Muricatum*, *Piper longum*, sandal wood, and the wild variety of indigo called 'Nilsundi'; 3. *Symplocos racemosa*, *Piper Chaba*, Chebulic myrobalans, dry ginger, *Piper longum*, pepper, and the ashes of barley spikes; and 4. the juice of raw pomegranates, cummin seeds, and sugar. The following group of drugs, reduced to pulv and mixed with treacle and honey, does great good if the patient keeps it in his mouth: *Nigella sativa*, cummin seeds, pepper, grapes, tamarind, pomegranates, and 'Sanchál' salt. Other five groups of drugs, each reduced to pulv, prove beneficial if kept in the mouth. They are 1. *Cinnamomum Zeylanicum*, *Cyperus rotundus*, cardamoms of the larger variety, and coriander seeds; 2. *Cyperus rotundus*, *Phyllanthus Emblica*, and *Cinnamomum Zeylanicum*; 3. *Berberis Asiatica*, and

Ptychotis Ajowan ; 4. *Piper longum*, and *Piper Chaba* ; and 5. *Ptychotis Ajowan*, and tamarind. The following gargle also does great good: take a quantity of old tamarind and treacle; dissolve it in water and mix therewith the pulv of *Cinnamomum Zeylanicum*, of cardamoms of the larger variety, and of pepper. Another gargle prescribable in this disease is made of 'Vit' salt and honey mixed with the juice of pomegranates. Another good medicine which promptly restores the desire for food and strengthens the digestive fire consists of the following ingredients. Take a quantity of mustard seeds of the larger variety, cummin seeds, and assafœdita. Fry these on a fire, reduce them to pulv, and add dry ginger powder and 'Saindhava' salt. Mix the pulv thus composed with an equal quantity of curds made of cow's milk, and stir it for sometime with a stick. Straining it through a piece of cloth, mix the semi-liquid portion with an equal measure of whey. This should be used as a drink. Take 2 tolas of pomegranate powder ; add to it 3 tolas of 'Khîri' molasses, and 1 tola of *Cinnamomum Zeylanica*, cardamoms of the larger variety, and leaves of *Cinnamomum Tamala*. This medicine, administered internally in proper measure, cures disgust for food, increases the digestive fire, and allays fever, bronchitis, and inflammation of the schneiderian membrane with loss of the sense of smell. Besides these, the other medicines prescribable in this disease are 'Yamánishádava,' 'Kalahansatintiri-pánaka' 'Rasálá,' and 'Sulo-chanábhra.'

All those kinds of food for which the patient feels a desire, which are easily digestible, and which allay the excitement of the three faults, should be prescribed. During meals the patient should use thrice or four times

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the gargles indicated above. If there is no fever, the patient should bathe in current water or large and spacious tanks of clear water. He should rove in pleasant gardens and woods, and listen to good music, and indulge in such practices as make the mind cheerful. The food placed before the patient should be clean. The dishes and cups, the cook, and they who serve the food, should all be clean. Every thing that is calculated to make the mind cheerless, and all food that may produce repugnance, should be avoided.

VOMITING AND NAUSEA.

Indulgence to excess in liquid substances, eating largely
different kinds of oily food, eating
Causes and symptoms. repulsive food, indulgence in salt in
a large measure, untimeliness in respect of eating,
irregularity in respect of the measure of food and exercise,
fear, anxiety, indigestion, worms in the intestines, anything
that excites antipathy or detestation during pregnancy,
and similar other causes excite the three faults and produce
this disease. The excited faults quickly afflict the mouth and
cause severe pain all the over the body. Vomiting and nausea
are of five kinds, *viz.*, 1. wind-born, 2. bile-born, 3. phlegm-
born, 4. that born of all three faults, and 5. accidental. The
symptoms that manifest themselves before the patient
actually vomits are desire or tendency to throw out the
contents of the stomach, total suppression of eructations,
saline and watery secretions from the mouth, and a disgust
for food and drink.

In the wind-born variety there is pain in the chest and
the sides. The mouth becomes dry.
Symptoms of the wind- Pinching pain is felt in the head
born variety. and the navel. Cough, hoarseness
of voice, and a sensation of the body being pierced as if by
a thousand needles, are the other symptoms. The patient
vomits, at intervals, liquid matter of an astringent taste, with
loud noise. The intervals are marked by noisy eructations.
The vomiting is accompanied by great pain, and the ejected
matter is sometimes seen to be mixed with froth.

In the bile-born variety the symptoms are swoons, thirst, dryness of the mouth, and a burning sensation in the head, the palate, and the eyes. The patient sees darkness around. The vomited matter is either yellow, or green, or of a smoky colour. It is slightly bitter and very hot. During the time of vomiting, the patient experiences a burning sensation in the throat.

In the phlegm-born variety the symptoms that present themselves are drowsiness, the presence of a sweet taste in the mouth, phlegm-
 Symptoms of the phlegm-born variety. onous secretions from the mouth, disinclination for food, sleep, absolute disgust for food, and heaviness of the body. The ejected matter is oily, thick, of a sweet taste, and white in hue. During the time of vomiting, the bristles of the body stand erect, and the patient feels severe pain.

The symptoms in this variety of the disease are deep-seated pain in the stomach, the abdomen or chest, indigestion, disgust for food, burning sensation all over the body, thirst, heaviness of breathing, and swoons. The ejected matter is of a saline taste. It is, besides, hot, blue or red in colour, and thick,

The vomiting that results from eating food that is repulsive, or the smell or sight of objects that are repulsive or abominable, is regarded as belonging to the accidental variety. That vomiting also which appears in women at the time of pregnancy, or which is due to the presence of worms in the intestines, or of raw and indigested matter in the stomach, is also classed under this head. Accidental

vomiting, when it presents the preponderating symptoms of a particular fault, is also regarded as born of that fault. Vomiting, when due to worms, is accompanied by severe pain. The urging becomes very strong, and some of the symptoms of chest-disease born of worms are also manifested.

If in this disease the excited wind suppresses stools and urine and perspiration, and obstructs the juice-bearing ducts, and begins to move upwards, and if in consequence thereof the patient's confined bile and phlegm and the wind-vitiated 'dhátus' begin to issue out of the body, and if the vomited matter has the smell of stools and urine, then the patient becomes afflicted by thirst and heavy asthmatic breathing and hiccup, and soon succumbs. In that form of the disease in which the patient becomes weakened and always vomits matter mixed with blood and pus, death is seen to ensue. When also the vomited matter presents the colour of peacock plumes, and when bronchitis, asthma, fever, hiccup, thirst, vertigo, chest-disease, &c., supervene, the disease becomes incurable.

The water of fresh and unripe cocoanuts, water in which burnt chupatis have been drenched, or dipped, and ice-water, are very beneficial in this disease. The decoction also of cardamoms of the larger variety quickly allays vomiting. All kinds of vomiting may be cured by the infusion of *Tinospora cordifolia*, taken with a little honey. The stems of the plant should be soaked in water in the evening, and the patient should drink the infusion, mixing it with honey, in the morning. Severe vomiting may be quickly allayed by giving the patient drink from water in which the dried bark of *Ficus religiosa* has been dipped while burning. The other medicines which

prove beneficial are the infusion of *Oldenlandia biflora*, the infusion of the roots of *Ægle marmelos* taken with a little noney, and the infusion also of the roots of *Sansciviera Zeylanica* taken with water in which rice has been washed. If the vomited matter consists of blood, the medicine that operates favourably is liquorice and sandal-wood of the red variety, at first well grinded with milk and then dissolved in milk. If the patient licks powdered myrobalans of the Chebulic variety, mixed with honey, then purging takes place and vomiting is allayed. Severe vomiting may be checked by the following compound: one tola of the juice of *Phyllanthus Emblica*, and one tola of the juice of *Feronia Elephantum*, mixed with the pulv of *Piper longum*, and black pepper, and honey. By licking 'Sanchál,' salt, sugar and the pulv of blackpepper, taken in equal measures, immediate benefit may be derived. In the wind-born variety of the disease, milk and water in equal proportions, or 'Saindhava' salt and ghee, oes great good. In the phlegm-born variety immediate benefit is derived by licking the pulp of the seeds of *Eugenia jambolana* and *Zyziphus jujuba*, mixed with honey, or *Cyperus rotundus* and *Rhus succedanea* with honey. Very severe and obstinate cases of vomiting may be promptly allayed by drinking water in which 3 or 4 grain of the dung of the cockroach has been dissolved. The other medicines are 'Eládichurna,' 'Rasendra,' 'Vrishava-dhwa-rasa,' and 'Padmakádyá-ghrita.'

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all varieties of this disease, fast is prescribed during the first stage. When the tendency to vomit has abated, food that is easy of digestion and that restores to the wind its normal course, should gradually be given. When the tendency to vomit lasts, the decoction of fried *Phaseolus*

Mungo, mixed with fried paddy reduced to powder, and a little honey and sugar, should be given. This allays not only vomiting, but watery motions, fever, burning of the skin, and thirst. After the tendency to vomit has subsided, all kinds of food that the patient is capable of digesting with ease may be taken. If there be no fever, the patient may bathe according to his habit in current water or large tanks. Clean food and drink, residence in clean rooms and places, the smell of fragrant objects, and everything that contributes to the cheerfulness of the mind, are especially beneficial in this disease. All such things as inspire abomination, and exposure to the heat of the sun or fire should also be avoided.

THIRST.

The wind excited by fear, excessive toil, loss of strength, and other causes, as also the bile excited by pungent and sour food, by wrath, by fasts, and other causes, produce this disease. It may also be generated by the water-bearing ducts being all vitiated by the excited wind. Before the appearance of this disease, the palate, the throat, the lips, and the mouth become dry. A burning sensation is felt all over the body. Delirium, swoons, and vertigo are also counted among the incubatory symptoms. Thirst is of seven kinds : 1. wind-born, 2. bile-born, 3. phlegm-born, 4. Wound-born, 5. that born of waste, 6. that born of undigested food, and 7. that born of food.

In the wind born variety of this disease the symptoms that are observable are dryness of the mouth, cheerlessness of the face, pain in the head and forehead as if these are pierced by innumerable needles, obstruction of the juice-bearing and water-bearing ducts, and vitiation of the organ of taste. In the bile-born variety the symptoms are swoons, disgust for food, delirium, burning of the skin, redness of the eyes, excessive or unappeasable thirst, desire for cool things, a bitter taste in the mouth, and a cheerless state of the mind. In the phlegm-born variety the symptoms that manifest themselves are excessive sleep, a sweet taste in the mouth, and dryness of the body. The thirst which follows loss of blood due to wounds or the pain produced by wounds, is regarded as of the wound-born variety. That thirst which results from loss of the juices, is regarded

as waste-born. In this variety of the disease the patient's thirst is not appeased by even repeated drinks of water. Besides this, the patient experiences pain in the chest, shivering of the body, and loss of memory and thinking. In that variety of this disease which is born of indigestion the symptoms are piercing pain in the chest, eructations accompanied by expectoration of phlegmonous and other matter, and langour of the whole body. Besides these, the symptoms of those varieties which are born of the excited faults standing alone, also manifest themselves more or less. That thirst which results from food that is excessively oily owing to a large admixture of ghee and oil in its preparation, or food that is sour, or saline, or pungent, and difficult of digestion, is regarded as food-born. Thirst sometimes appears as a supervening symptom of other diseases. It really falls under one or other of the fault-born varieties. In this kind of thirst the symptoms are weakness of the voice, swoons, a sense of excessive fatigue and weakness, and dryness of the mouth, the throat, and the palate. The body soon becomes dry and it is very difficult of cure.

Any variety of thirst appearing in a severe form in a patient who is afflicted by fever, or
 Fatal symptoms. swoons, or waste, or bronchitis, or asthma, especially when accompanied by vomiting and dryness of the mouth as supervening symptoms, proves fatal.

In the wind-born variety, the juice of *Tinospora cordifolia*
 Treatment. proves very beneficial. In the bile-born variety the juice of the ripe fruit of *Ficus Glomerata* or their decoction produces beneficial results. Another medicine that checks this variety of thirst consists of the following ingredients. Take 2 tolas of the fruit of *Gmelina arborea*, sugar, red sandal wood, the roots

of *Andropogon muricatum*, the fragrant wood called Padmakáshta, dried grapes, and liquorice. Throw these, in the evening, into hot water measuring one-eighth of a seer. Straining the water next morning through a piece of cloth, give it to the patient to drink. These ingredients may also be pounded and dissolved in water. The patient by drinking this water derives considerable benefit. Five annas and a half of each of these drugs, viz., *Cyperus rotundus*, *Oldenladia biflora*, coriander seeds, the roots of *Andropogon muricatum*, and red sandal wood should be taken; add 2 seers of water, and boil them down to 1 seer. Strain it through a piece of cloth. By drinking this water a little at a time, phlegm-born thirst may be allayed. By drinking also, in a luke-warm state, the decoction of the bark, or the leaves, or the flowers of *Melia Azadirachta*, which operates as an emetic, thirst of this variety may be relieved. In thirst born of indigestion, the following does great good, viz., the decoction of the fruit of *Piper longum*, the roots of the same, *Piper Chaba*, the roots of *Plumbago Zeylanica*, dry ginger, *Rumex vesicarius*, pepper, *Ptychotis Ajowan*, and the seeds of *Semecarpus Anacardium*, and similar other drugs which strengthen the digestive fire, mixed with the dried fruit of *Ægle marmelos*, *Acorus Calamus*, and assafoedita, each reduced to pulv. In wound-born thirst, the juice of meat, and blood, do much good. In waste-born thirst, milk, water with honey, and the juice of meat, are beneficial. In food-born thirst the administration of emetics is the best treatment. A linctus made of the fruit of *Phyllanthus Emblica*, the roots of *Nelumbium speciosum*, *Aplotaxis auriculata*, fried paddy, and the hanging roots of the banian, each reduced to pulv and taken in equal measures, and mixed with honey,

alleviate both thirst and dryness of the mouth. The decoction of the leaves of the mango and of *Eugenia jambolanum*, or of the barks of these, or of the pulp of the seeds of these, mixed with honey, alleviates both vomiting and thirst. The decoction of coriander seeds also, taken after having been kept for a day or two, proves beneficial in thirst. The hanging roots of the banian, sugar, *Symplocos racemosus*, pomegranates, liquorice, and honey, mixed with water in which 'átapa' rice has been washed, check both vomiting and thirst. The juice of grapes or that of the sugarcane, or milk, or the decoction of liquorice, or honey, or the juice of 'sundi' fruit, if drunk through the nose, checks the most severe and obstinate cases of thirst. The filaments of *Citrus medica*, honey, and pomegranates, reduced to paste and then dissolved in water, form an excellent gargle capable of checking all kinds of thirst. 'Kumudeswara-rasa' is one of the best medicines prescribable in all varieties of this disease.

All those things which are savoury and cool, and endued with a sweet taste, are prescribable in this disease. Everything that is of keen potency, and that excites the body, should be avoided.

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SWOONS, VERTIGO, AND APOPLEXY.

Food and drink composed of inharmonious elements, suppression of the urgings of stools and urine, wounds due to weapons and falls, and all acts which lessen the attribute of *Sattwa*,* excite the wind and other faults. These, penetrating into those ducts which are the seat of the mind and by which the mind communicates with the senses, increase the attribute of *Tamas** and produce swoons or loss of consciousness. Unable to feel pleasure or pain, the patient lies on the ground, in a state of unconsciousness, like a piece of wood. This, indeed, is the general symptom of this disease. Before loss of consciousness comes, the patient feels pain in the chest, and yawns repeatedly. He becomes cheerless and uneasy, and his mind becomes dull. These are the premonitory indications of the disease. Swoons are of seven varieties : 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that which is born of all the faults, 5. blood-born, 6. that which is born of alcoholic drinks and other intoxicating drugs, and 7. that which is born of the action of poison on the system. One peculiarity of this disease is that even if the other faults be excited, the bile always

* The three words, 'Sattwa', 'Rajas', and 'Tamas', roughly speaking, correspond with Goodness, Passion, and Darkness. All acts of human beings proceed from one or the other of these. Piety and all good acts are inspired by the attribute of 'Sattwa'; all acts appertaining to profit and pleasure proceed from 'Rajas', while all sinful acts are inspired by 'Tamas'. 'Sattwa' is unconnected with worldliness of every kind. It is concerned with the achievement of emancipation. 'Rajas' is concerned with all acts of worldliness, such as proceed from affection for kinsmen, the desire for wealth and pleasure, &c. Sin and crime appertain to 'Tamas'.

predominates, the reason being that the bile and the attribute of *Tañas* are the generating causes of this disease.

In the wind-born variety, the patient, immediately before losing consciousness, sees the welkin
 Symptoms. to be either blue, or dark, or red. He regains his senses soon after, for the period of unconsciousness is of very small duration. The other symptoms are shivering, a relaxation of all the limbs, pain in the chest, emaciation, and darkness or redness of the complexion. In the bile-born variety, the patient loses consciousness while seeing the welkin as red, or yellow, or green. When the swoon leaves the patient, the symptoms noticeable are perspiration, thirst, a sensation of heat, redness or yellowness of the eyes, watery stools, and yellowness of the body. In the phlegm-born form of the disease, the patient sees the clear sky to be partially or completely clouded, or entirely darkened. Sense returns after sometime. While sense is returning, the patient feels his body to have become heavy as if covered with a wet piece of cloth or leather. Salivary and other secretions appear in the mouth, and a tendency to vomit is also experienced. In that variety which is born of all the faults, the symptoms appear in a combined state of each separate variety. The patient falls down suddenly as in epilepsy and remains unconscious for a long time. The other symptoms, however, of epilepsy, such as vomiting frothy matter, grinding the teeth, displacement of the eyes, contractions of facial muscles, &c., do not occur in this. In blood-born swoons, the sight and the limbs become fixed or paralysed, and the breathing becomes weak. In swoons born of alcoholic drinks, the patient, uttering delirious sayings and violently stretching his arms and legs, falls down in unconsciousness. This swoon lasts till the digestion is

complete of the alcohol taken. In poison-born swoons, shivering, sleep, thirst, darkness of vision, and other well-known symptoms of poisoning appear.

• The wind and the bile becoming excited and combining with the attribute of *Rajas* (Passion),
 Causes of Vertigo. produce vertigo. The patient believes that his own body and all surrounding objects are revolving or whirling round. He cannot, on that account, stand upright. Indeed, in endeavouring to do so, he falls down.

When the wind and the other faults become exceedingly excited and affect the heart which
 Apoplexy. is the seat of life, and thereby destroy the functions of the mind and the senses, and produce a deep swoon, such deep swoon is called 'Sanyāsa' (apoplexy). This disease cannot be conquered without piercing the patient with needles, applying keen collyria to the eyes, administering errhines of keen potency, rubbing the body with the cods enveloping the seeds of *Mucuna pruriens*, and other acts of a similar nature that revive sensibility.

When swoons occur, cold water should be sprinkled over the face and eyelids of the patient.
 Treatment. Causing him to lie down on a soft bed, he should be fanned for some time. If the teeth be set together owing to lockjaw some means should be adopted for separating them. If the sprinkling of cool water does not bring back sense, the patient should be made to inhale the scent of ammonia, 2 parts, mixed with 1 part of dry lime, kept in a phial. An errhine may be administered, consisting of 'Saindhava' salt, *Acorus Calamus*, pepper, and *Piper longum*, taken in equal measures and reduced to paste with water. A collyrium made of the seeds of *Mimosa sirissa*, *Piper longum*, pepper, 'Saindhava' salt, garlics, realgar, and *Acorus*

Calamus, taken in equal measures and pounded with cow's urine,* or 'Saindhava' salt, pepper, and realgar taken in equal measures and pounded with honey; acts quickly in restoring sense. We have a medicine of our own, called 'Kumudāsava' It quickly terminates swoons and restores the patient to sense.

In vertigo, milk should be given in which have been boiled *Asparagus racemosus*, the roots of *Sida cordifolia*, and dried grapes.

The seeds of *Sida cordifolia*, pounded with sugar, operate beneficially. The triple fruits reduced to pulv and mixed with honey, administered at night, and ginger with treacle administered during the morning, allay vertigo, swoons, bronchitis, malignant jaundice, and insanity. Take one tola of each of these, viz., dry ginger, *Piper longum*, dill seeds, and Chebulic myrobalans; pound them with 6 tolas of treacle; and make pills each of the weight of half a tola. These pills alleviate vertigo. This disease may also be checked by another medicine which consists of one anna of ghee mixed with the decoction of *Hedysarum Alhagi*. The administration also of all those 'Rasāyanas' such as 'Silājatu', and rubbing the body with ghee that is at least 10 years old, prove very beneficial in this disease.

For restoring one afflicted by apoplexy to sense, the administration should be resorted to of collyria mentioned in the chapter under Epilepsy. Potent errhines also, the insertion of smoke into the nostrils, piercing the body with needles, insertion of hot spikes of iron below the nails, afflicting the body in diverse other ways, dragging the patient by the hair, biting him, and rubbing the body with the cuds that envelope the seeds of *Mucuna Pruriens*,

How to restore sense in
Apoplexy.

and other acts of a similar nature, should be resorted to. After the patient has been restored to sense, the medicines which are prescribable in swoons should be administered. In the case of infants, castor oil or the pulv of lead ore should be given for purging them. Subsequently, 'sweda' should be applied to the abdomen. If apoplexy be due to the existence of worms in the stomach, anthelmintics should be administered.

In swoons and vertigo and apoplexy, 'Sudhánidhi-rasa,' 'Murchchántaka-rasa,' 'Aswagandhá-rishta,' and the medicines, ghees, and oils spoken of under Epilepsy and Insanity, should be administered. Our own 'Murchchántaka-taila,' is specially beneficial in these diseases.

In all these diseases such food and drink as are nourishing and strength-giving should be prescribed. The meals during the day should consist of old rice boiled, and such pulses as *Phaseolus Mungo*, *Vicia lens*, *Phaseolus radiatus*, *Cicer arietinum*; the soup of such fishes as *Kai*, *Magura*, *Singi*, *Khalisa*; goat's meat, figs, *Trichosanthes dioica*, the bulbous root-stock of *Colocasia Indica*, *Cucurbita Pepo*, brinjals, plaintain-flowers, plaintain-stems, unripe-fruits of the jack, and such other vegetables, cheese, whey, curds, grapes, pomegranates, ripe mangoes, ripe 'pepiyá,' unripe cocoanuts, custard apples, and other nourishing fruit. At night the patient may be given 'poorees' or 'chupatis,' all those kinds of food that are made of wheat-flour, milk, ghee, and sugar. At dawn vaccine milk, fresh from the udders, is very beneficial in these diseases. Various kinds of sherbets also are prescribable. Sesāme oil should be rubbed on the body, and baths.

agreeably to what the patient can bear, should be taken in current water or in large lakes and tanks. Fragrant scents, pure air, moon-light, agreeable conversation, music, and such other things as keep the mind cheerful, should be indulged in. These prove very beneficial. Food that is difficult of digestion, or that is of keen virtues, or dry, or that produces acidity, all acts that are toilsome and fatiguing ; anxiety, fear, grief, wrath, everything that produces mental perturbation, alcoholic drinks, remaining in a sitting posture for hours together, exposure to the sun, riding on horse-back, suppression of the urgings of stools and urine, of thirst, of sleep and of hunger, night-keeping, sexual indulgence, and the use of tooth-sticks for cleaning the teeth, are forbidden in these diseases.

DISEASES OF INTOXICATION.

These diseases are produced by one's taking alcoholic drinks in excessive measure, without those restraints which considerations of health suggest, at unreasonable hours, and regardless of the measure of one's strength or capacity to bear them. Besides this, wrath, panic, grief, and indulgence in wine at a time when one is hungry, or worn out by exposure to the sun, by hard physical exercises, by bearing heavy loads, or by long walks, or when one is weak from other causes, are known to produce these diseases. They are of four kinds : 1. Pánátyaya, 2. Paramada, 3. Pánájirna, and 4. Pána-bibhrama.

In that variety of Pánátyaya in which the wind predominates, the symptoms that manifest themselves are hiccup, asthmatic breath, shivering of head, pains in the sides, loss of sleep, and violent delirium. In that variety of this disease in which the bile predominates, the symptoms are thirst, burning of the skin, fever, perspiration, stupefaction, diarrhœa, vertigo, and yellowness of complexion. When phlegm predominates, the symptoms observable are vomiting, nausea, disgust for food, lethargy, a sensation of heaviness throughout the body, a sensation of cold, and a feeling of the body being wrapped with a piece of wet cloth. In that variety of this disease which is brought on by all the faults, the above symptoms present themselves in a combined state.*

* 'Pánátyaya in which the wind predominates is delirium tremens. The other varieties are classed under it, though the symptoms presented by them do not exactly agree with those of delirium tremens.

In consequence of the predominance of phlegm in this disease, the symptoms are secretion of phlegm from the nose, heaviness of the body, tastelessness of the mouth, suppression of stools and urine, lethargy, disgust for food, thirst, headaches, pain in all the joints as if these are broken.

In 'Pánájirna' the symptoms are excessive flatulence of the stomach, eructations, vomiting, a burning sensation in the stomach, and inability to digest the wine taken.

In 'Pánabibhrama' the patient feels in every part of the body, especially in the chest, a pain as if he is pricked by a thousand needles. Phlegmonous secretions, pain in the throat accompanied by a feeling as if vapours are issuing out of it, swoons, vomiting, fever, and severe headache, burning sensation of the skin, disgust for wine and everything into whose composition wine has entered, as also for cakes and other food of the kind, manifest themselves.

In that disease of intoxication in which the upper lip of the patient falls down, and the patient feels cold in the exterior while there is a burning sensation in the interior, in which the patient's face looks glossy as if rubbed with oil, the tongue, lips, and teeth become black or yellow, and the eyes become red, death frequently ensues.

Hiccup, fever, vomiting, pain in the sides, cough, and vertigo are often the supervening symptoms of these diseases.

Drinking alcoholic wines constitutes the best treatment of all diseases due to intoxication.

Treatment. When the diseases have been ge-

nerated by drinking wines in excessive measure, the patient derives benefit by drinking in proper measure. In delirium tremens, after the wine taken has been digested, the patient should take a little more wine diluted in water and mixed with 'Sanchál' salt, dry ginger, *Piper longum*, and pepper, each reduced to pulv. In that variety of the disease which is characterised by excitement of the bile, old and cooling wines may be given, mixed with sugar, and the juice of grapes, and the fruit of *Phyllanthus Emblica*. In this variety of the disease, fragrant wines, or wines largely diluted in water, or wines mixed with sugar and honey, prove beneficial. Wines mixed with the juice of the fruit of *Dillenia Indica*, dates, dried grapes *Grewia Asiatica*, pomegranates, and barley flour, are prescribable. By causing the patient to drink wine largely mixed with the juice of the sugarcane and then to vomit, beneficial results may be expected in the bile-born variety of this disease. In that variety which is characterised by excitement of the phlegm, the patient should be made to vomit by giving him wines mixed with emetics. After this he should be made to fast according to his strength. If he feels thirsty, the cooled decoction should be given of *Pavonia odorata*, *Sida cordifolia*, *Doodia lagopodioides*, and *Solanum Xanthocarpum*, or of dry ginger. All the varieties of this disease may be alleviated by administering wine mixed with the pulv of *Piper Chaba*, 'Sanchál' salt, assafoetida, the bark of *Citrus medica*, dry ginger, and *Ptychotis Ajowan*. For alleviating the excitement of the faults, the decoction should be given of *Hedysarum Alhagi* and *Cyperus rotundus*, or of *Hedysarum Alhagi* and *Oldenlandia biflora*, or of *Cyperus rotundus* only. This decoction alleviates fever and thirst as well. 'Ashtángasalt' is the best medicine for that variety of this disease in

which the phlegm predominates. All diseases born of alcoholic drinks are alleviated by drinking water in which has been dissolved fried paddy reduced to powder, the pulp of Arabian dates, dried grapes, the larger grapes called 'Manakká', the pulp of tamarind, and the juice of pomegranates and the fruit of *Phyllanthus Emblica*.

For allaying the burning sensation of the patient, the usual combinations should be applied.

Scriptural medicines.

The following medicines are mentioned in the authoritative medical treatises of old, viz., 'Phalatri-kádyá-churna,' 'Eládyá-modaka,' 'Mahákalyána-báji,' 'Punar-navá-ghrita,' 'Vrihat-Dhátri-taila,' and 'Srikhandásava.' These, administered with discretion, prove very beneficial.

If immediately after drinking wine one licks sugar mixed with ghee, no intoxication is produced.

Some means for checking intoxication. The intoxication generated by eating rice obtained from the paddy called 'kodo,' may be prevented by water in which has been dissolved the pulp of *Cucurbita Pepo* and treacle. The intoxication produced by chewing betel-nuts is allayed by drinking cold water to one's fill. The smell of dry cowdung, as also eating a little salt, allays this kind of intoxication. The intoxication produced by eating the fruit of *Datura fastuosa* is allayed by taking milk with sugar. For allaying the intoxication produced by 'bhang' (leaves of *Cannabis Sativa*) warm ghee, the expressed juice of the leaves of the jack, the infusion of tamarind pulp and the water of unripe coconuts, are efficacious. Another effective remedy is hot water. The doses have, however, to be repeated. The action is instantaneous. A glass or two of brandy also checks the action of 'bhang' without producing the intoxication of brandy.

In delirium tremens, oily and hot rice, the meat-juice of quails, francoline partridges, hens, peacocks, and such birds as live at the water's edge, the soup made of fishes, 'pooris', 'Vesavára' (chops, cutlets, &c.), and food that is sour or saline in taste, are beneficial. Cold water should be drunk. The patient should also bathe according to his capacity to bear it. In that variety of the disease which is characterised by excited bile, cool rice, the soup, mixed with sugar, of *Phaseolus Mungo*, the juice of all kinds of agreeable meat, should be given. The patient should sit and sleep in cool places, enjoy cool air, bathe in cold water, and use cool sandal-paste and other unguents of the kind. In the phlegm-born variety, the patient should at the outset fast. He should then be given the juice, unmixed with ghee, of goat's flesh or meat-juice mixed with the juice of pomegranates, or rice and meat fried after having been soaked in the juice of pomegranates, and mixed with pepper reduced to pulv. All other acts which mitigate phlegm should also be resorted to. The patient should drink warm water. He should not bathe. If at any time he wishes to bathe, he should use warm water.

BURNING OF THE SKIN.

Through diverse causes the bile, becoming excited, produces a burning sensation in the palms of the hand, the soles of feet, the eyes, or, indeed, on the entire surface of the body. This burning is generated by the excited bile. Hence, it is present in all such diseases which are due to excitement of the bile. If the blood be excessively increased through any cause, a burning sensation is felt. Thirst, a coppery hue in the eyes or on the whole body, and the smell of iron in the body and the mouth, manifest themselves. The patient suffers much pain and feels as if he is encompassed by a blazing fire all around. If one does not drink water when thirsty, the watery ingredients of the body gradually dry up and the heat of the bile, becoming enhanced, produces a burning sensation both internally and externally. This burning sensation dries up the throat, the palate, and the lips. The patient protruding his tongue begins to shiver. If the juices, the blood, and other 'dhátus' decay, a kind of burning is produced in which the patient becomes subject to swoons and thirst ; his voice becomes weak, and he becomes incapable of exertion. If it is not promptly and properly treated, death is likely to ensue. If in consequence of wounds inflicted with weapons, a rush of blood takes place to the heart or any other part of the body, a frightful kind of burning is produced. If burning be due to wounds on the head, or the chest, or any other vital part of the body, it becomes incurable. Any kind of burning which is internal while the exterior of the body remains cool, is regarded as incurable.

In this disease the bowels should be kept clear.

Treatment. Burning may be relieved by the infusion of coriander seeds in one-eighth seer of water, mixed with sugar. The seeds should be thrown into the water in the evening, and the patient should drink the infusion in the morning. The expressed juice of *Tinospora cordifolia*, as also of *Oldenlandia biflora* are good alleviatives of burning. All medicines which have been mentioned in the chapter on fever as alleviative of burning when it is a supervening symptom, should be administered in burning when it is unaccompanied by fever. Ghee which has been washed a hundred times, or such ghee mixed with fried barley reduced to flour, should be rubbed on the body. Causing the patient to lie down on lotus or plantain leaves, he should be fanned with a palm-leaf sprinkled over with water in which has been dissolved a little sandal-paste. The patient may also be bathed in water in which has been dissolved the pulv of *Pavonia odorata*, 'Padmakáshtha', the root of *Andropogon muricatum*, and white sandal wood. The decoction known as 'Chandanádi', 'Triphaládya-kasháya', 'Parppatádi-páchana', 'Dáhántaka-rasa', 'Sudhákara-rasa', and 'Kánjika-taila', are efficacious remedies in this disease. If it is accompanied by fever, no ghee or oil should be rubbed on the body, and the patient should not be made to bathe.

In this disease such food should be given as is alleviative of bile. It is necessary to eat things that are bitter in taste. If burning be unaccompanied by fever, all those kinds of food may be given which are prescribable in the treatment of swoons. Baths in cold water, cold

Diet and forbidden
practices.

water drinks, the sherbet of sugar, the juice of the sugar-cane; milk, butter, and other cooling things are prescribable in this disease. All those kinds of food and all those acts which are forbidden in swoons, should be avoided by the patient in this disease also.

INSANITY.

Eating food consisting of such inharmonious ingredients as milk and fish, or food, which is
 Causes, mixed with poison, or food which causes disgust, insults to the deities, the Bráhmans, and seniors and preceptors, sudden fear, or joy, or grief, disposition of the body or limbs in uneven attitudes, wrestling with stronger men, and similar other acts which put a severe strain upon the nervous system, excite the faults and vitiate the seat of the understanding, the heart, and all those ducts by which the mind communicates with the organs of sense. This leads to a disturbance of the mind from which springs insanity. Insanity is a mental disease. The mind becomes restless and vacant ; the understanding, subject to errors ; the vision unstable ; actions become purposeless ; and speech, incoherent. These are the general symptoms of this disease.

If after the heart has been perturbed by constant brooding over anxieties, one takes dry, or cold, or insufficient food, and if at such a
 Symptoms of wind-born
 Insanity. time one indulges in acts that provoke the wind, such as moving the bowels, or observing fasts, or allowing the constituent 'dhátus' of the body to decay, the result is wind-born insanity. In this insanity the

patient laughs on improper occasions, dances, and sings, talks incoherently, disposes his limbs or body in ridiculous attitudes, and weeps, shedding tears. The patient's body becomes emaciated, dry, and of a reddish hue. The disease increases in strength at the time the food in the stomach is being digested.

If after the heart has been disturbed by anxieties, one takes pungent, or sour, or hot food, or such food as becomes sour while digestion goes on, or eats before the food last taken has been digested, or indulges in any act that provokes the bile, the result is a violent excitement of the bile and insanity born thereof. The symptoms that manifest themselves are capacity to endure pain, indulgence in display, unwillingness to wear any sort of covering or clothes, angry rebukes and censures administered to others, roaring, running or flying away with great speed, heat of the body, exhibition of wrath, enjoying cool and shady spots, desire for cool food and drink, and a yellowness of complexion.

If, abstaining from every act involving physical exertion, one eats too much and does other acts that are provocative of phlegm, then the phlegm, becoming excited and mingling with the bile, produces what is called phlegm-born insanity. In this variety of the disease, the patient talks little, shows very little activity, and feels a disgust for food and a desire for sexual indulgence. He wishes to remain in lonely and solitary places. Sleep, vomiting, and salivary secretions from the mouth, paleness of the skin, of the urine, of the eyes, and of the nails, and increase of the intensity of the disease after meals, are the other symptoms.

When all the three faults become excited owing to the combined presence of causes that provoke each of them, the result is a form of insanity which is regarded as born of all the faults. The symptoms of the three varieties already mentioned, manifest themselves in a combined state. This variety is incurable.

If a person experiences a sudden panic, or incurs loss of wealth, or sustains bereavements by the death of friends, or if one fails to obtain a woman or any other desirable object upon which one has set one's heart, the mind becomes powerfully affected and the result is insanity. Such insanity is classed as grief-born. The patient loses the sense of propriety of conduct. He reveals the secrets of his heart, and sings, or laughs, or weeps without apparent cause.

By taking poison or poisoned articles, one may be afflicted by insanity. The eyes become red and the face dark. The mind becomes cheerless and the senses become clouded. His strength decreases, and his features and complexion lose their brightness and agreeability.

If in any kind of insanity the patient always remains with face turned upwards or bent downwards, and if he becomes exceedingly emaciated, weak, and sleepless, death is likely to occur very soon.

Besides these kinds of insanity there is another called 'Bhutonmáda', or insanity due to the action of evil spirits, malignant planets, &c If malignant and other kinds of

spirits, and superhuman beings of other orders, enter the body, this kind of insanity is generated. Like the Jiva-soul entering the material body, these imperceptibly enter the body of one that is afflicted with some disease ; and then they manifest their respective characteristics. Those beings that partake the nature of the deities enter the human body on the day or the night of the full moon. The Asuras have the morning and the evening twilights as their time for doing this. The Gāndharvas have the eighth day of the moon ; the Yakshas have the first day ; the Pitris, the day or the night of the new moon ; the Nāgas, the fifth day of the moon ; the Rākshasas, the night ; and the Pisāchas, the fourteenth day of the moon, as their respective opportunities for possessing an individual. In insanity that springs from the entrance into the body of these superhuman beings, one's power of speech, strength, prowess, knowledge of religious and other truths, and skill in the mechanical arts increase to preternatural proportions.

Symptoms of insanity due to the action of superhuman beings.	<p>In insanity caused by the action of the deities or beings partaking of their nature, the patient is always contented. His practices are always pure and clean. His body emits a fragrance like that of celestial garlands and unguents. He becomes drowsy and abstracted. He talks pure Sanskrit. He is full of energy (when he rouses himself). His gaze is steadfast. He becomes a giver of boons, and devoted to Brāhmins. In insanity due to the action of Asuras, the patient's body is always covered with sweat. He speaks ill of the deities, Brāhmins, preceptors, and seniors. His gaze becomes keen and crooked ; he becomes fearless and wicked in conduct. He derives no</p>
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gratification by even eating and drinking largely. When the disease is due to Gandharvas, the patient is always cheerful. He roves in river banks and delightful woods. He acts properly, and betrays a love of music and fragrant scents and garlands. He smiles sweetly and dances in charming attitudes. If the disease be due to Yakshas, the patient's eyes become red. He betrays a likeness for red robes and vestments. His disposition becomes grave. He walks and moves rapidly, speaks little, and becomes enduring and energetic. He is always desirous of making presents to others. When the Pitris possess an individual, he becomes tranquil of mind and enacts the performance of *Srāddhas* by offering oblations of water and rice-balls to his deceased ancestors, becomes devoted to them, and manifests the desire of eating meat, sesame seeds, raw sugar, and frumenty. In the disease brought about by Nāgas, the patient sometimes crawls on his breast and repeatedly licks with his tongue the corners of his mouth. He becomes very wathful and expresses the desire of eating raw sugar, honey, milk, and frumenty. If possessed by Rākahasas, the patient becomes desirous of eating meat and blood and drinking alcoholic liquors. He becomes exceedingly shameless, very cruel, endued with exceeding strength and prowess, and wrathful. He indulges in abominable acts, and desires to wander in the night. In insanity caused by Pisāchas, the patient raises his arm or both arms upwards. He desires to be nude ; and becomes emaciated ; his body becomes dry and emits a foul smell ; he always speaks incoherently ; he is always impure and unclean, exceedingly greedy of food and drink, eats voraciously, wanders in solitary woods and deserts, acts inconsistently, and indulges very much in weeping and shedding tears.

That patient who, while afflicted by any of these forms of insanity that are brought about by the action of superhuman beings, has his eyes dilated, or who runs and moves about with rapidity, or who licks with his tongue the froth that appears in his mouth or in the corners thereof, or who, falling down on the ground, shivers or trembles violently, or who is possessed by any of the beings already mentioned at a time when he has fallen down from a height, seldom gets cured. If the disease be not treated for thirteen years, it becomes incurable.

Indications of curability or otherwise.

In wind-born insanity the drinking of oils, and in the bile-born and the phlegm-born, cerebral purgatives, are prescribable. The patient derives much benefit by drinking old ghee every morning. The following makes a good cerebral purgative: flowers of *Mimosa Sirissa*, garlics, dry ginger, white mustard seeds, fruit of *Acorus Calamus*, *Rubia Munjista*, turmeric, and *Piper longum*. These should be pounded with goat's milk and then formed into pills. The pills should be dried in the shade. When dry, they should be rubbed on a stone plate with water. This water operates as a good errhine. This water may also be used as a collyrium. Threatening, striking, and frightening the patient, giving him that upon which he has set his heart, soothing and comforting him with sweet words, gladdening him, and inspiring him with wonder, prove especially beneficial. The seeds of the fruit, plucked and kept for sometime, of *Curcubita Pepo*, pounded with water into a paste and mixed with honey, should be administered. Unfledged sparrows may be given pounded with milk. A collyrium prepared of the following ingredients, *viz.*, *Piper longum*, pepper, 'Saindhava' salt,

and 'gorochana' (concretions in the gall-bladder of the cow), taken in equal measures and pounded together with honey, does good. Take the following in equal measures, *viz.*, white mustard seeds, assafoedita *Acorus Calamus*, *Galedupa Indica*, *Pinus deodara*, *Rubia cordifolia*, Chebulic myrobalans, *Phyllanthus Emblica*, *Terminalia Bellerica*, *Clitoria Ternatea* of the white variety, the bark of *Cardiospermum Halicacabum*, dry ginger, *Piper longum*, pepper, *Aglaia Roxburghiana*, the bark of *Mimosa Sirissa*, turmeric, and *Berberis Asiatica*; pound them together into a paste with goat's urine. This, dissolved in water, may be given as a drink. It may also be used as an errhine, a collyrium, and an unguent for rubbing the body with. Dissolving the paste in a large quantity of water, the patient may bathe in it. Dissolving this paste in water and then cooking it after the manner of cooking ghee, give it to the patient to drink. Beneficial consequences may be expected from this medicine. If the patient be possessed by any of the deities, or Ghandharvas, or Pitris, his body should not be subjected to any painful operation, nor should any painful collyrium be used. 'Swáraswata-churna,' 'Unmáda-gajánkusa,' 'Unmádabhanjana-rasa,' 'Bhutánkusa-rasa,' 'Chaturbhuja-rasa,' and the three medicines mentioned in the chapter on nervous diseases, *viz.*, 'Chintámani,' 'Báta-chintámani,' and 'Chintámani-chaturmukha,' are some of the well-known scriptural remedies applied in this disease. By using with discretion the following medicines, *viz.*, 'Pániyakalyánaka-ghrita,' 'Kshirakalyána-ghrita,' 'Chaitasa-ghrita,' 'Sivá-ghrita,' 'Mahápaisáchika-ghrita,' 'Náráyana-taila,' 'Mahánáráyana-taila,' 'Madhyamanáráyana-taila,' 'Himságara-taila,' 'Vishnu-taila,' and similar ghees and oils, insanity may be cured or relieved.

All such food and practices as allay the wind and keep the bowels clean and the body oily and cool, are prescribable in insanity. Diet forbidden practices. Insane people should be carefully guarded against drowning or burning themselves and against falling down from high places. All those kinds of food and drink that have been mentioned in the chapter on Swoons as prescribable in that disease, are prescribable in this also. Those kinds of food and those practices which are forbidden in Swoons are forbidden in Insanity.

EPILEPSY.

Wind, bile and phlegm, exceedingly excited by the usual causes, produce Epilepsy. In common parlance it is called (in Bengali) 'Mrigi', Loss of consciousness, subversion and derangement of the eyes, froth from the mouth, and tossing of the arms and the legs, are the common symptoms of this disease. The incubatory indications are shivering of the heart, a sense of emptiness of the chest, copious perspiration, deep anxiety, stupefaction, and loss of sleep. This disease is of four kinds: 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all three faults. All the varieties of epilepsy have this common characteristic: they manifest themselves at intervals of twelve, or fifteen, or thirty days. Sometimes the intervals between the fits are longer.

In the wind-born variety the symptoms are shivering, lockjaw, vomiting of froth, heavy breathing, and the sight in all directions of imaginary shapes of a dark or red colour.

Symptoms of the wind-born variety.

In the bile-born variety the body becomes hot. The patient feels thirsty. The face, eyes, and the froth vomited become yellow.

The patient sees every thing to be yellow or red, or beholds imaginary shapes that are yellow or red. He further thinks that he is surrounded by a blazing fire.

In the phlegm-born variety, the face, the eyes, and the froth vomited, become white. The body becomes cool and a sensation of heaviness is experienced. The hair

stands erect. Imaginary shapes are seen, in all sides, of a white colour. In this variety the patient regains his senses later than in the other varieties. In other words, the fits last longer.

In this variety the symptoms that present themselves are those of the three other varieties in a combined state. This form of epilepsy proves incurable. The dis-

ease, when it afflicts a weak person, or when it is of long standing, becomes equally incurable. The fatal symptoms are continued shivering, weakness of the body, moving of the eye-brows, and subversion and derangement of the eyes.

In consequence of derangements of the uterus, the stoppage or scantiness of the menstrual flow, disregard or neglect by the husband, or his cruelty to her, or his incapacity or neglect to gratify her sexual appetite, or early widowhood, or grief, or violent mental perturbation, superfluity or scantiness of blood, constipation of the bowels, or indigestion, and other causes of a similar nature,

Symptoms of the bile-born variety.

Symptoms of the phlegm-born variety.

Symptoms of the variety born of all the faults.

Epilepsy of females or hysteria.

young women become subject to a kind of epilepsy that is peculiar to them. It is called epilepsy of women. •

Before the appearance of the fit, the symptoms are pain in the chest, yawning, and cheerlessness of both body and mind. The patient suddenly loses her senses. As in epilepsy, there is vomiting of froth in hysteria. The pupils of the eyes do not become dilated. Some indulge in causeless laughter, or weep, or utter loud cries, or wrongly accuse their relatives, or, wrongly accusing themselves, ask pardon. Such and other delusions are observable in this disease. Common people, observing these symptoms, regard the patient as possessed by evil spirits. Some patients think that something round continually rises upwards from their abdomen to the stomach, and feel pain in some limb or other. In hysteria the patient is startled at the sight of a blazing light or upon hearing a loud noise. The desire for sexual indulgence becomes keen.

As soon as the disease manifests itself, treatment should begin, for if allowed to remain for sometime without treatment, it becomes incurable. In epilepsy, as in swoons, for restoring the patient to consciousness, water should be sprinkled upon the face and the eyes. If this does not succeed, a collyrium may be applied, made of realgar, galena, and pigeon's dung, pounded together with honey. Liquorice, assafoedita, the fruit of *Acorus Calamus*, the bark of *Tabernamontana Coronaria*, the seeds of *Mimosa Sirissa*, garlics, and *Aplotaxis auriculata*, pounded together with cow's urine, form a good errhine as also collyrium. These two varieties of collyrium, and this errhine, prove beneficial in insanity also. Even old cases of epilepsy are considerably alleviated by an errhine made

of *Nardostachys Jatamansi*, as also by inhaling its smoke. By drinking the cold water into which has been thrown the ashes of a string or rope with which one has strangled oneself, relief may be obtained in epilepsy. By eating milk and rice after taking every day one anna of the fruit of *Acorus Colamnis* reduced to powder and mixed with honey, by taking liquorice pounded with the water of *Cucurbita Pepo*, and by drinking the decoction of the ten roots, benefit may be derived in epilepsy. The other medicines are 'Kalyána-churna', 'Vátakulántaka', 'Chandabhairava-rasa', 'Panchagavya-ghrita', of both the 'Swalpa' and the 'Vrihat' varieties. 'Maháchaitasa-ghrita', 'Bráhma-ghrita', 'Palan-kasádyá-taila', besides those mentioned as prescribable in swoons and nervous diseases. These should be administered with discretion, using particular media, agreeably to the particular fault that has been excited.

In hysteria also, for bringing back the patient to her senses, the remedies prescribable in swoons for restoring consciousness should be used or administered. The treatment should be the same as in swoons and epilepsy. If the menstrual flow be suspended, proper remedies should be applied for restoring it. In hysteria of females, our own 'Murchcchántaka-taila', and 'Kumudásava', are very efficacious.

All kinds of food and practices that are prescribable in swoons and insanity are prescribable in epilepsy and hysteria. Similarly, food and practices that should be avoided in swoons and insanity should also be abstained from in epilepsy and hysteria.

DISEASES OF THE NERVOUS SYSTEM.

The use of food that is dry, or cold, or light, or scanty, excessive indulgence in sexual congress, night-keeping, excessive vomiting and purging, excessive loss of blood, taking long leaps, excessive swimming in water, fatiguing walks, grief, anxiety, waste of the ingredients of the body through disease, suppression of the urgings of stools and urine, wounds, fasts, falling down from running vehicles, and other causes of a similar kind, provoke the wind and produce diverse varieties of nervous disease. The wind may be vitiated in numberless ways. In medical treatises, eighty forms are referred to, but names have not been applied to all the forms. Those forms only which have been named and whose symptoms also have been indicated, will be noticed here. As regards the other forms, all that is necessary to observe is that in treating them such medicines should be applied as are known to alleviate the wind. In some varieties of nervous disease, indications are observable of excited bile and phlegm. In treating them, the physician should keep the fact in view. The remedies that are prescribable in those cases should be able to allay not only the wind but the excited bile and phlegm also.

When the excited wind fills up the nerves, it convulses the body in all manner of attitudes. These convulsions are called 'A'kshepa.' When the wind, afflicting the heart, the head, and the forehead, convulses the body and disposes it in the form of a bow, the disease is known as 'Apatantraka' or apoplectic convulsions. Some-

Causes.

Convulsions, Apoplectic convulsions, and Hysterical convulsions.

times the patient loses his senses ; the eyes remain half shut or open, without the eyelids winking at all ; there is no vision ; the breathing becomes heavy and difficult, and a noise like that of the cooing of the pigeon is emitted by the throat. The body becomes convulsed. This variety of convulsions is called 'Apatánaka' (hysterical convulsions.) In this disease, when the excited wind afflicts the heart, loss of sense takes place, and the other symptoms manifest themselves. When, however, the wind moves away from the heart, the patient regains consciousness and ease. When the excited wind, combining with phlegm, assails all the nerves and causes the body to become as rigid as a wooden post, destroying the power of contracting the limbs, the disease is called 'Dandápatánaka' or Rigid spasm. That variety of the disease in which the body becomes bent like a bow is called tetanus. Tetanus is of two kinds according as the body bends forwards or backwards. When the wind assails the nerves of the stomach, the chest, the throat, &c., the body bends in a forward direction. This is called 'Antaráyáma' or Emprosthotonos. The patient's eyes become motionless ; he suffers from lockjaw, and vomits phlegmonous matter. When the wind afflicts the nerves of the back, the patient bends backwards. This is called 'Vahiráyáma' or Opisthotonos. The patient's chest, waist, and the thighs seem to be broken. This disease is naturally incurable. If tetanus is caused by abortion, or copious hemorrhage, or wounds, it very generally proves fatal.

If the excited wind afflicts only half the body, the nerves and muscles of that side become contracted or dried up, and the joints become loosened. The result is that side of the body becomes inactive and almost dead. This disease is

Paralysis.

known by the name of paralysis. It is of two kinds. In some, either the right or the left side becomes afflicted ; it is then called Hemiplegia ; while in others, the upper or the lower part of the body becomes subject to this affliction. If the lower or inferior portion of the body be affected, it is called Paraplegia. In paralysis, if the bile be excited along with the wind, the symptoms are burning of the skin, internal heat, and swoons. If the phlegm be excited, the body becomes cool, the limbs become heavy, and consumption also manifests itself. If paralysis be brought about by the wind alone, without the action of bile or phlegm, it becomes incurable. Sometimes this disease, instead of affecting only half the body, affects the entire body.

In consequence of always speaking aloud or chewing hard substances, or loud laughter, or yawning, or carrying heavy loads or lying in uneven attitudes or on uneven places, the wind becomes excited and turns half the face with the neck towards either the right or the left side. The other symptoms that manifest themselves are shivering of the head, suspension of speech, and diversion and displacement of the eyes. This disease is called 'Arddita' or facial paralysis. There is pain in the neck, the chin, and the teeth of that side of the face and the neck which is affected. If the wind alone is excited, salivary secretions take place from the mouth. There is pain also and shivering in the head. The other symptoms are throbbing pain, lock-jaw, suspension of speech, inflammation of the lips, and piercing pain. If the bile be excited, the face assumes a yellow colour. Fever, thirst, swoons, and burning also manifest themselves as supervening symptoms. If the phlegm be excited, the cheeks, the head, and the

muscles of the nape of the neck become inflamed, and almost paralysed. In that disease in which the patient becomes weakened, in which the eyelids become winkless, speech becomes difficult and indistinct, and shivering of the head appears, cure can hardly be expected. When also the disease is of three years standing or more, it proves incurable.

By scratching the tongue forcibly or for a long time (while washing the mouth), or by chewing hard articles, or in consequence of wounds, the wind at the root of the jaw becomes excited and loosens the joints of the jaws so that if the mouth be shut it can no longer be opened, and if open it can no longer be shut. This is called lock-jaw or dislocation of the cheek-bone. In consequence of sleep at day time, or disposing the neck in uneven attitudes, or gazing at anything with eyes expanded or turned upwards, the wind, becoming excited and uniting with phlegm, paralyses the muscles of nape of the neck. The result is that the neck can no longer be turned at will. It becomes as stiff as a wooden post. This disease is known by the name of wry neck. When the excited wind possesses those nerves which are called into play when one speaks or utters any noise, the consequence is paralysis of the tongue. The patient becomes unable to eat, drink, and speak. This disease is called paralysis of the tongue. The excited wind, by affecting the nerves and the muscles of the neck, produces cephalagia. The patient becomes unable to move his head. The affected nerves become dry, dark, and painful. This disease is naturally incurable. In that nervous disease in which the hips are first affected, then the waist, then the back, then the thighs, then the knees,

Dislocation of the cheek-bone, Wry neck, paralysis of the tongue, Cephalagia, and Sciatica.

then the calves of the legs, and lastly the ankles and the feet, and in which all those parts become stiff, accompanied by piercing pain, is called sciatica. If the wind be alone excited, the parts repeatedly throb. If both the wind and the phlegm be excited, the symptoms are drowsiness, heaviness of the body, and disgust for food. The nerves of the arms, when afflicted by the wind, make one unable to stretch out or contract one's arms at will. This disease is called 'Viswachi'. It sometimes affects only one arm and sometimes both the arms. The excited wind, uniting with the vitiated blood, produces a kind of tumour in the knee-joint, that looks like the head of a jackal. It is called 'Kroshtuka-sirsha' or synovitis of the knee-joint. If the wind in the waist, becoming excited, contracts the nerves and the muscles of one of the calves, it produces lameness of one leg. If the nerves and the muscles of both the calves are affected, lameness of both legs is the result. If when one begins to walk, one's legs tremble before they become steady, the disease is called 'Kaláya-khanja'. In this disease, the joints become loose, without retaining their compactness. If the wind, becoming excited in consequence of walking on uneven land or of fatiguing toil, produces pain in the ankles, the disease is called 'Vátakantaka' or sprain in the ankle. By constant walking, the wind, the bile, and the blood, become vitiated and produce the disease, called 'Pádadáha' or burning of the feet. If the feet lose the sensation of touch, and become subject to constant horripilation, and the sensation known as pins and needles, the disease is called 'Pádaharsha'. It is the first stage of leprosy. This disease is produced by both the wind and the phlegm being excited together. The wind in the shoulder, becoming excited, dries up the phlegm which sustains the shoulder-

joint.* The result is 'Angsasosa' or drying up of the shoulder-joint. When the excited wind contracts the nerves and the muscles of the shoulder, the disease is called 'Avaváhuka' or stiffness of the shoulder-joint. This is brought on by both wind and phlegm. When the wind, uniting with phlegm, vitiates the nerves of speech, the result is complete dumbness, or a nasal twang or indistinct utterance. That disease in which, owing to the action of the wind, piercing pain, generated at first in the stool-bearing intestines or the urinary bladder, gradually extends into the rectum or the pennis (or the vaginal canal, in the case of females), is called 'Tuni.' Similar pain, when it rises in the rectum or the pennis (or in the vaginal canal, in the case of females) and gradually spreads into the 'Pakkásaya' or that part of the stomach where digestion goes on, it is called 'Pratituni.' When the wind being confined in that part of the stomach where digestion takes place, causes it to swell and make a rumbling noise accompanied by pain, the disease is called flatulence. When similar pain is generated in the *ámásaya* and is unaccompanied by swelling of the region or the sides, the disease is called 'Pratyádhmána.' If a swelling, unaccompanied by pain, fixed or moving, hard as stone and extending upwards, appears below the navel, it is called 'Ashthilá.' If the swelling appears in an oblique position, it is called 'Pratishthilá.' In both these varieties of the disease, stools and urine and the downward wind become suppressed. The entire body, especially the head, shivers. Such shivering is called 'Vepathu' or paralysis *agítans*. Cramps also in the feet, the calves, the thighs, and the joints of the hand, are produced by the excited wind.

All varieties of Nervous disease are difficult to cure.

Curability or otherwise. If treatment be not commenced as soon as the disease appears, it very

generally becomes incurable. If paralysis and other severe forms of Nervous disease be accompanied by erysipelas, burning of the skin, severe pains, suppression of stools and urine, swoons, disgust for food, and anorexia, or inflammations, insensibility to touch, prostration of the limbs, shivering, and flatulence, and if the patient's strength and flesh be reduced, little hope can be entertained of cure.

The common treatment of all forms of Nervous disease

Treatment. is the use or application of medicated ghees and oils. In apoplectic and

hysterical convulsions, strong or keen errhines should be administered for restoring sense. The patient may be quickly restored to sense by administering an errhine made of the following drugs taken in equal measures and reduced to pulv, viz., pepper, seeds of *Moringa pterygosperma*, *Embelia Ribes*, and leaves of the small-leaved variety of *Ocimum Sanctum*. By internally administering the pulv of Chebulic myrobalans, the fruit of *Acorus Calamus*, *Vandu Roxburghii*, 'Saindhava' salt, and *Rumex Vesicarius*, mixed with pulv of ginger, relief may be obtained in apoplectic convulsions. In hysteric convulsions, the decoction of the ten roots, with the pulv of *Piper longum*, cast into it, should be given to the patient to drink. In hysteria and hysteric convulsions, the patient derives benefit from taking sour curds, with the pulv of pepper, before meals. In paralysis, the infusion of *Phaseolus radiatus*, the roots of *Mucuna pruriens*, the roots of *Ricinus Communis*, and *Sida cordifolia*, mixed with assa-fœdita and 'Saindhava' salt, should be given to the patient to drink. Cooking an oil, according to rules, with the paste

of the roots of *Piper longum*, the roots of *Plumbago Zeylanica*, the fruit of *Piper longum*, dry ginger, *Cymbidium tessaloides*, and 'Saindhava' salt, and the infusion of *Phaseolus radiatus*, the patient should be rubbed therewith. Another oil proves equally, if not more, beneficial in paralysis. It is cooked with the paste of *Phaseolus radiatus*, the roots of *Mucuna pruriens*, *Aconitum heterophyllum*, the roots of *Ricinus Communis*, *Cymbidium tessaloides*, dill seeds, and 'Saindhava' salt, and the infusion, first, of *Phaseolus radiatus*, and then of *Sida cordifolia*. The measure of each of the infusions should be four times that of the oil to be cooked in them. The oil, thus prepared, should be rubbed over the patient. In facial paralysis, if there is dislocation of the jaw, it should be reduced by inserting the thumbs wrapped in a piece of cloth and pressing down the dislocated extremities of the jaw bones. If the cheeks fall down, they should be set right by proper appliances. If the mouth becomes rigid, 'sweda' should be resorted to. Facial paralysis may be relieved by the patient's eating bruised garlies, with butter. Relief may be had in facial paralysis, in hemiplegia, and rigidity of the arms, by drinking or snuffing the infusion of *Sida cordifolia*, *Phaseolus radiatus*, the roots of *Mucuna pruriens*, *Andropogon Schænanthus*, and the roots of *Ricinus Communis*. In wry neck, rub the part with the liquid portion of the egg of a hen, mixed with salt and ghee, and heated on a fire. By applying a plaster made of the roots of *Withania Somnifera*, or by rubbing mustard oil, relief may be obtained in wry neck. When the nerves of speech become deranged, the patient should hold in his mouth ghee and oil and other substances. In rigidity of the arms and stiffness of the shoulder-joint, the patient should snuff, after his evening meals, the decoction of the ten roots, *Sida*

cordifolia, and *Phaseolus radiatus*, mixed with oil or ghee, In 'Váhuçosha', or the disease in which the arms dry up and waste, the patient should take milk boiled with *Hedysarum gangeticum*. In sciatica the patient should drink the decoction of *Vitex Nigundo* prepared on a slow fire. The pain in the pubic regions and the rectum in sciatica may be relieved by the decoction of the roots of *Ricinus Communis*, the bark of *Ægle marmelos*, *Solanum Indicum* and *Solanum Xanthocarpum*, taken with 'Sanchál' salt. Castor oil taken with the decoction of the triple fruit (or the three myrobalans) proves beneficial in sciatica and rigidity of the thighs. Castor oil taken with the decoction of the ten roots, *Sida cordifolia*, *Vanda Roxburghii*, *Tinospora cordifolia*, and dry ginger, gives relief in sciatica, rheumatism of the legs, and even lameness. In flatulence the pulv of *Piper longum*, 2 tolas, the pulv of the root of *Convolvulus Turpethum*, 8 tolas, and sugar 8 tolas, mixed together with honey, half a tola, form a good medicine. Pains in the abdomen as also flatulence is relieved by applying a plaster made of *Cedrus deodara*, or *Aplotaxis auriculata*, dill seeds, assafœdita, and 'Saindhava' salt, pounded together with Kánji. In that form of flatulence which is known by the name of 'Pratyádhmána,' emetics, fasts, and drugs that promote digestion, as also enemas, always prove beneficial. In cephalagia, the patient should be rubbed with oil cooked with the decoction of the ten roots and the expressed juice of *Citrus medica*. 'Ashtilá' and 'Pratyashthilá' should be treated after the manner of treating abdominal tumours. In 'Tuni' and 'Pratituni,' enemas should be used with oily liquids. The patient should also drink the ashes of the green spikes of barley and assafœdita, mixed with hot ghee. In 'Khalwi,' the feet should be rubbed with oil

mixed with *Aplotaxis auriculata*, 'Saindhava' salt, and *Rumex vesicarius*, and heated on a slow fire. In sprain of the ankle leeches should be applied and other methods resorted to for blood-letting. Hot needles also may be used for cauterising the part. Synovitis of the knee-joint and burning of the feet should be treated after the manner of treating leprosy. In burning of the feet relief may be had by applying plasters of pounded *Cicer lens* boiled in water. By rubbing the feet with butter and then applying the heat of a slow fire, burning of the feet may be relieved. In the disease called 'Pádaharsha,' which is regarded as the preliminary stage of leprosy, the use of the oil called 'Kuvja-prasárini' proves beneficial.

In all nervous diseases the chief treatment consists of rubbing the patient with oils of different kinds. The following oils should be used with discretion, *viz.*, 'Swalpa-Vishnu-taila', 'Vrihat-Vishnu-taila', 'Náráyana-taila'. 'Madhyama-náráyana-taila', 'Mahánáráyana-taila', 'Siddhárthaka-taila', 'Himaságara-taila', 'Váyuchcháyá-surendra-taila', 'Másha-valádi-taila', 'Saindhava-taila', 'Pushparájaprasárini-taila', 'Kuvjaprasárini-taila', 'Mahámasha-taila', and similar other oils. For internal administration the following are regarded as beneficial, *viz.*, 'Rásnádi-páchana', 'Máshavaládi-páchana', 'Kalyánavaleha', 'Swalparasonapinda', 'Trayodacángaguggulu', 'Dacamuládyaghrita', 'Chhágaládyá' and 'Vrihat-chhágaládyaghrita', 'Chaturmukha-rasa', 'Chintámani-chaturmukha', 'Vátagajánkuça', 'Vrihat-vátagajánkuça', 'Yogendra-rasa', 'Rasarája-rasa', 'Chintámani-rasa', 'Vrihatvátachintámani-rasa,' and other medicines of the kind.

In all kinds of Nervous disease, oily and nourishing food is beneficial. The diet prescribable in swoons and vertigo is prescribable

Diet and forbidden practices.

in these ailments also. The head of the *Rohita* fish, and meat-juice, and other nourishing diet should be given. As regards baths, the same directions that apply to swoons and vertigo apply to these. If, however, in paralysis or any other disease of the Nervous system, the phlegm happens to be excited, or if there is fever, the patient should then bathe in lukewarm water at intervals longer or shorter as he may be able to bear. All kinds of cooling drinks and operations should also be abstained from. All those kinds of diet and practices which have been forbidden in swoons and vertigo should be avoided in these diseases also.

LEPROSY.

By eating food that is exceedingly saline, or sour, or
pungent, or alkaline, or oily or hot, or
Causes. raw, that is uncooked or unboiled, or
indigestible, or by eating the dried or rotten meat of aquatic
animals or of those that live in marshes, by eating meat in
excessive measure, or such articles as *Dolichos biflorus*,
Phaseolus radiatus, radishes, the variety of dolichos known
as 'simbi,' the expressed juice of sugarcane, curds, 'kánji,'
wines and other alcoholic stimulants, by eating food consist-
ing of inharmonious ingredients, by taking food before the
food last taken has been digested, and by indulgence in
wrath, sleep at daytime, and night-keeping, as also by
travelling long distances at a stretch on elephants, horses,
camels, and other animals, the blood becomes heated and
vitiated. The vitiated blood, uniting with the excited
wind, produces the disease called leprosy (*Váta-rakta*).
Beginning at either the soles of the feet or the palms of
the hand, it travels upwards slowly like the poison of the
rat and pervades at last the entire body. The incubatory
symptoms are either copious perspiration or the total
suppression of perspiration, the appearance of black spots
here and there on the skin, and loss of the sense of touch.
If a sore happens in any part of the body, it becomes very
painful and shows no sign of healing quickly. The joints
become lax, a langour overtakes the whole physical organism,
and pimples also appear here and there. A piercing pain,
as if pricked with a hundred needles, is felt in the knees,
the calves, the thighs, the waist, the shoulders, the hands,
the feet, and joints. Spasms also are felt; and sometimes
the pains appear to be cutting. The patient feels a heavi-

ness in all the limbs. The sense of touch becomes dull. Sometimes an itching or tickling sensation is felt in every part of the body. The patient, at times, feels as if hundreds of ants are travelling in all directions under the skin.

If the wind predominates, the symptoms that manifest themselves are deep-seated pains in the abdomen, spasms in all parts of the body, breaking pains in the limbs, swellings which are dry (without being dropsical), and the appearance of a dark or darkish hue on the swollen parts. All the symptoms of the disease sometimes manifest themselves vigorously and sometimes in a weakened form. The nerves, the fingers, and the limbs become contracted. Severe pains all over the body are felt. The patient dislikes everything that is cooling to the touch. Indeed, such things injure him greatly. The whole body seems to be stupefied or paralysed, litheness and activity of the limbs disappearing. There are occasional tremours. The sense of touch becomes dull or is lost more or less completely. If the vitiated blood predominates, the swellings take a coppery hue. A constant itching is felt in the swollen parts, and foetid secretions flow from them. The patient feels a burning sensation and piercing pains as if he is being pricked with a thousand needles. Neither oily unguents, nor drying operations, bring any relief. If the bile be predominant, the symptoms that appear are burning of the skin, stupefaction of the body, copious perspiration, swoons, a sense of inebriation, and thirst. The swollen parts become so sensitive that they cannot be touched without producing great pain. Besides the swollen parts become hot to the touch, burn, assume a red colour, and suppurate. If phlegm predominates,

the symptoms are stupefaction and heaviness of the body, partial loss of the sense of touch, brightness of complexion, sensibility to cold, itching, and mild pain. If two of the faults or three predominate, the symptoms of each present themselves in a combined form.

That leprosy which is born of the excitement of only one fault, or which is not of long standing, Curability or otherwise of the disease. is curable. If it be one year old, it is capable of suppression. Leprosy born of two of the faults is also suppressible. That leprosy is incurable which is born of the three faults and which is accompanied by loss of sleep, disgust for food, asthma or heavy breathing, ulceration, headache, stupefaction of the body, a sense of inebriation, pains, mild or severe, thirst, fever, swoons, tremours, hiccup, lameness, erysipelas, suppuration of the swollen parts, a sensation of being pricked with a thousand needles, vertigo, langour, bending of the fingers, bursting of the swollen parts, burning of the skin, excruciating pain in the vital parts of the body, and tremours. A few only of these symptoms is enough to make the disease incapable of cure. Besides, if leprosy be accompanied by only stupefaction or unconsciousness, it becomes incurable. That leprosy also which beginning from the soles of the feet spreads upwards to the knees and in which the skin is seen to burst is not amenable to treatment.

Treatment should be begun as soon as the incubatory symptoms become manifest, for it very Treatment. generally becomes incurable if all the symptoms are allowed to develop themselves. Leeches should be applied to those parts of the body which lose the sense of touch; or the knife should be used to open them for letting out the vitiated blood. Oily purgatives, or

oily enemias prove beneficial. For purging the patient, three or four Chebulic myrobalans, agreeably to the strength or bearing capacity of the patient, should be administered, pounding them with old treacle. Another purgative that may be advantageously prescribed, consists of the marrow or pulp of the fruit of *Cassia fistula*, mixed with the decoction of *Tinospora cordifolia* and the bark of *Justicia Adhatoda*, and castor oil. If there is pain in any part of the body, plasters should be applied of soot, *Acorus Calamus*, *Aplotaxis auriculata*, dill seeds, turmeric, and *Berberis Asiatica*, pounded together with water. Another plaster that proves beneficial consists of these: *Vanda Roxburghii*, *Tinospora cordifolia*, liquorice, and *Sida cordifolia*, pounded together with milk. The decoction, or paste or pulp of *Tinospora cordifolia* is very beneficial in this disease. Besides these, the *Páchanas* known as 'Amritádi,' 'Vásádi,' 'Navakárshika,' and 'Paṭoládi,' the pulp known as 'Nimvádi,' 'Kaīṣora-guggulu,' 'Rasábhra-guggulu,' 'Vátaraktántaka-rasa,' 'Guduchyádi-lauha,' 'Mahátáleṣwara-rasa,' 'Guduchi-ghrita,' 'Amritádyá-ghrita,' 'Vrihat-Guduchyádi-taila,' 'Maháru draguduchi-taila,' 'Rudra-taila,' and 'Mahápinda-taila,' are efficacious remedies in this disease. Some other medicines, such as 'Panchatikta-ghrita' and the rest, which have been spoken of as beneficial in tubercular leprosy and skin diseases included under 'Kushtha', may be applied with discretion in this disease.

During day time old rice, the soup of *Phaseolus Mungo* or of the chick pea, curries of vegetables which have a bitter taste, and such vegetables as *Trichosanthes dioica*, the smaller variety of *Ficus glomerata*, plantains of the variety called 'Thote,' the bulbous root of *Colocasia Indica*,

Diet and forbidden
practices

Momordica charantia of the smaller variety, the same of the larger variety, the ripe fruit of *Cucurbita*, *Pepo*, &c., *Enhydra Heloncha*, new-born leaves of *Melia Azadirachta*, *Boerhavia diffusa* of the white variety, and leaves of *Trichosanthes dioica*, should be given. The evening meals should consist of 'puris' and curries made of the vegetables already mentioned. Confectionery that is sweet should be avoided. Of milk the patient should take only a little. For tiffin chick pea soaked in water should be taken. This is very beneficial in leprosy. In making curries, ghee (and not oil) should be used. The patient may also take as much raw ghee as he can bear. New rice, all kinds of food that are difficult of digestion, food that causes acidity, fish, meat, wines, and alcoholic drinks, the variety of dolichos known as 'simbi', pease, treacle, curds, copious measures of milk, sesame, *Phaseolus radiatus*, radishes, pot-herbs other than those mentioned above, sour articles, sweet gourds, potatoes, onions, garlicks, chillies, and large measures of sweets, should be avoided. The patient should, besides, never suppress the urgings of stools and urine. He should avoid exposure to the heat of the sun or of fire, as also physical exercises, sexual indulgence, giving way to anger, and sleep at day time. These are especially baneful in leprosy.

PARALIPSIA.

[URUSTAMBHA.]

By eating in large measures food that is cold, hot, or liquid, or hard, or heavy, or light, or oily, or dry, by filling the stomach with food before the food last taken has been digested, toil, exercising the body too much, sleep at day time, night-keeping, and similar causes excite the wind, which, in its turn, vitiates the blood and the bile. When the vitiated blood and bile find their way into the thigh, they produce the disease called Paralipsia. The thigh becomes stupefied, cold, without sensation, heavy, and painful. The patient loses the power of moving or raising it. The mind becomes full of anxiety. Pains are felt in other parts of the body. The patient experiences a sensation of his body being wrapped round with a wet cloth or blanket. The other symptoms are drowsiness, vomiting, nausea, fever, stupefaction of the particular leg affected, loss of the sense of touch, and great difficulty and pain in moving the limb. Paralipsia (Urustambha) is otherwise called 'Adhya-vāta' (probably, rheumatism of the rich). The symptoms that precede this disease are excessive sleep, great mental distress, stupefaction of the body, fever, horripilation, disgust for food, vomiting, and weakness of both the calves and the thighs.

If burning of the skin, pains like to what one would feel if pierced with a thousand needles, and tremours supervene, death is seen to result. If treatment is not begun as soon as the disease appears, it becomes difficult of cure.

Such measures as alleviate the phlegm, without exciting the wind, constitute the best treatment of Paralipsia. At first such operations as dry the system may be resorted to for checking the phlegm, the wind being attended to afterwards. At the outset, therefore, 'sweda' should be had recourse to, and fasts, and other means for drying the system. If in consequence of the adoption of drying means the wind becomes more excited than before and produces loss of sleep and other symptoms of a similar kind, oily 'sweda' may be used. Plasters should be applied to the afflicted thigh, consisting of any of these groups of drugs pounded into a paste with cow's urine : 1. the fruit of *Galedupa Indica*, (syn. *Pongamia Glabra*), and mustard seeds ; 2. the roots of *Withania Somnifera*, *Asclepias gigantea*, *Melia Azadirachta* or *Cedrus deodara* ; 3. *Baliospermum montanum*, *Salvinia cucullata*, *Vanda Roxburghii*, mustard seeds ; and 4. *Sesbania aculeata*, *Vanda Roxburghii*, bark of *Moringa Pterygosperma*, *Acorus Calamus*, *Holarrhena antidysenterica*, and *Melia Azadirachta*. Other plasters also are prescribed : 1. mustard powder and earth obtained from an anthill, mixed with honey or with the expressed juice of the leaves of *Datura fastuosa*, heated on a fire ; and 2. the roots of *Datura fastuosa* (of the black variety), the fruit of the opium plant, garlics, pepper, *Nigella Sativa*, the leaves of *Sesbania aculeata*, the bark of *Moringa pterygosperma*, and mustard, pounded into a paste with cow's urine and heated on a fire. The three myrobalans, *Piper longum*, the tubers of *Cyperus rotundus*, *Piper Chaba*, and *Picrorrhiza Kurroa*, each reduced to powder, and of the measure of half a tola, or the three myrobalans and *Picrorrhiza Kurroa*, reduced to powder and of the same measure, mixed with honey, form a good medicine for internal ad-

ministration. The decoction of the roots and fruit of *Piper longum*, and the fruit of *Semecarpus Anacardium*, with honey, relieves this disease. The 'Páchanas' called 'Bhallátakádi' and 'Pippalyádi' 'Gunjábhadrā-rasā', 'Ashtakatwarā-tailā', 'Kīshthādya-tailā', and 'Mahāsaindhavādya-tailā' may be prescribed with advantage.

At daytime old rice, *Dolichos biflorus*, *Phaseolus Mungo*, chick pea, *Cicer lens*, *Trichosanthes dioica*,
 Diet and forbidden prac- *Ficus glomerata* of the smaller variety,
 tices. the terberous root of *Colocasia Indica*,
Momordica charantia of both the smaller and the larger varieties, the cods of *Moringa pterygosperma*, unripe jack fruit, brinjals, garlies, ginger, and other vegetables of a similar kind, the juice of the meat of goats, pigeons, and hens, as much ghee as the patient can bear, and a little whey, should be taken. The evening meals should consist of 'puris' or 'chappatis' of wheat flour, or of the kind of wheat flour called 'suji'. Curries made of the same vegetables, ghee, such confectionery as contains only a little sugar, and 'suji' fried in ghee and boiled with milk and a little sugar, should be given. For tiffin the patient may take *Uve passae*, Arabian date, and other fruits which alleviate phlegm without exciting the wind. Boiled water, made cool, should be drunk. The patient should abstain from baths. If he cannot do without them, he should indulge in them as little as possible. If the wind predominates, the patient should bathe in rivers or current water, and swim against the stream. All food that is heavy and difficult of digestion, all articles that excite the phlegm, fish, raw sugar, curds, the potherb called *Basella rubra*, *Phaseolus radiatus*, and cakes, should be avoided. The patient should eat sparingly. He should never suppress the urgings of stools and urine.

He should also abstain from sleep at daytime, night-keeping, and exposure to cold.

ACUTE RHEUMATISM.

[AMVATA.]

By eating milk and fish or such other food as consists
 Causes. of inharmonious or hostile ingredients,
 by eating food that is very oily, by
 excessive indulgence in sexual pleasure, by physical exercises,
 by swimming in water, by such practices as bring about
 loss of appetite, by total abstention from locomotion of
 every kind, and similar acts, raw food-juice * accumulates,
 through the action of the wind, in the 'ámácaya' and the
 joints of the body, which are the seats of phlegm. Vitiated
 also by the wind, this accumulated food-juice produces the
 disease called acute Rheumatism or 'Amaváta.' A general
 langour or debility of the body, disgust for food, thirst,
 unwillingness to stir or act, heaviness of the limbs, fever,
 indigestion, and swellings are the general symptoms of this
 disease.

When acute rheumatism manifests itself in a severe form,
 it becomes very painful. Swellings
 Supervening symptoms of appear, accompanied with severe pains,
 acute Rheumatism. in the hands, the feet, the head, the
 ankles, the waist, the knees, the thighs, and, generally, in

* When food goes into the stomach, it at first produces a watery substance called 'Rasa' or 'Anna-rasa.' It is this 'rasa' that is subsequently developed into blood, flesh, and the other ingredients of the body. That which is not converted into 'rasa' becomes 'kitta' or stools and urine.

all the joints. Those places in which the vitiated food-juice accumulates, become subject to pains resembling what is felt at the bite of a scorpion or centipede. Loss of appetite, watery secretions from the mouth and the nose, loss of energy, tastelessness of the mouth, burning of the skin, copious urine, deep-seated pain in the abdomen, hardness of the abdomen, sleep at day-time, loss of sleep at night, thirst, vomiting, vertigo, swoons, pain in the chest, constipation of the bowels, dulness of the body, rumbling noise in the stomach, epistaxis, &c., also manifest themselves.

In acute rheumatism born of excited wind, deep-seated and piercing pains, in the bile-born variety, burning of the skin, and a redness of complexion, and in the phlegm-born variety, a sensation of the body being wrapped round with a wet cloth or blanket, heaviness of the limbs, and constant itching, manifest themselves in addition to those symptoms already mentioned. If the disease be due to the excitement of two of the faults or all the three, the symptoms of each fault appear in a combined form. Acute rheumatism, when born of only one fault, is curable; when it is born of two faults, it is only suppressible; but when it is born of all the three faults, and, especially, when it is characterised by swellings on every part of the body, it does not prove amenable to treatment.

Treatment should be commenced at the outset; otherwise it becomes difficult of cure. Fasts, the application of 'sweda,' and purgatives constitute the chief treatment of the disease. 'Sweda,' by heating a small bag of sand, should be applied to the part or parts where there is pain. Another 'sweda' that may be applied with advantage may thus be given; take the

following articles, or as many of them as may be obtained, *viz.*, cotton seeds, the seeds of *Dolichos biflorus*, sesame, barley, the 'roots' of 'Eranda' of the country variety, linseed, *Boerhavia diffusa*, and the seeds of *Moringa pterygosperma*; pound them and drench the pounded product in kánji; divide it into two portions and tie each portion in a piece of cloth; take an earthen pot with a quantity of kánji in it; cover the pot with an earthen vessel (sará) with a number of small holes in it; use wheat-flour or some other substance for strongly fastening the 'sará' to the pot containing the kánji; place the pot of kánji, thus covered, upon a fire. When the kánji begins to boil, heat the two bags of the paste alternately by placing them upon the perforated 'sará.' With the bags thus heated, 'swedá' should be given to the patient. This kind of 'swedá' is called 'çwankara-swedá. Plasters made of *Ruellia longifolia*, the roots of *Costus speciosus*, the bark of *Moringa pterygosperma*, and earth obtained from anthills, pounded together with cow's urine, relieve this disease. Some other plasters are prescribable. They are 1. dill seeds, *Acorus calamus*, dry ginger, *Tribulus lanuginosus*, the bark of *Craterva religiosa*, *Sida cordifolia*. (of the yellow variety), *Boerhavia diffusa*, *Circuma Zerumbet*, *Pæderia fetida*, *Sesbania aculeata*, and assafœdita, (these should be pounded together with kánji and heated before application); 2. *Nigella sativa*, *Piper longum*, the pulp of the seeds of *Guilandina Bonducella*, and dry ginger; (these should be taken in equal measures and pounded together with the juice of ginger and heated before application); and 3. the exudation of *Euphorbia antiquorum*, mixed with salt. For purging the patient, the decoction of the ten roots, or of dry ginger, mixed with half a chuttack of castor oil, or more or less of it according as the case may require, or

castor oil only, of the proper measure and mixed with warm milk, should be administered. Other purgatives are prescribable with advantage; they are 1. the pulv of the roots of *Convolvulus Turpethum*, of the weight of 2 mashas, 'Saindhava' salt, 12 mashas, pulv ginger, 2 mashas, (these are to be mixed together and 4 or 6 annas of the mixture should be given with kánji); and 2. the pulv of *Convolvulus Turpethum*, mixed with the decoction of the same plant, agreeably to the process called 'bhávaná'; (this should be administered in the same measure, with kánji). The roots of *Plumbago Zeylanica*, *Picrorrhiza kurroa*, *Cissampelos hernandifolia*, the seeds of *Holarrhena antidysenterica*, *Aconitum heterophyllum*, and *Tinospora cordifolia*, reduced to pulv, or *Cedrus deodara*, *Acorus calamus*, the bulbous root of *Cyperus rotundus*, *Aconitum heterophyllum*, and Chebulic myrobalans, reduced to pulv, may be administered with beneficial results. The measure should be 4 to 6 annas in weight, and the vehicle, warm water. Besides these, some of the well-known medicines for this disease are 'Rásná-panchaka' 'Rásná-saptaka,' 'Rásnádi-kasháya,' and 'Mahárásnádi-kwátha,' 'Hingwádyachurna,' 'Alamvushádyachurna,' 'Vaiswánara-churna,' 'Ajamodádi-vataka,' 'Yográjaguggulu,' 'Vrihat-yogarāja-guggulu,' 'Singhanáda-guggulu,' 'Rasonapinda,' 'Mahárasanapinda,' 'Áinvátárivatiká,' 'Vátagajendrasingha,' 'Prasáriní-taila,' 'Vrihat-saindhavádyataila,' 'Vijayabhairava-taila,' as also 'Kuvjaprasáriní-taila,' and 'Mahámásha-tailá'. Other oils enumerated in the chapter on diseases of the nervous system, prove very beneficial when administered with discretion. If it be necessary to purge the patient, then the first four of these medicines should be administered, mixed with castor oil. Our own 'Vátárimarddana' promptly alleviates the pain of acute rheumatism. Indeed,

this medicine has been seen to relieve the pains of sciatica, hemiplegia, and many other diseases of the nervous system.

The directions about diet and forbidden practices laid down in the chapter on paralipsis should be observed in this disease also. The patient should never bathe in warm water. The seat of the pain should always be wrapped round with cotton or flannel. If there is fever, rice should be given up. Instead, the patient should take dry food such as chapatis of wheat flour, or sago, or food that is light.

ABDOMINAL PAINS.

[CULA.]

That disease in which one feels excruciating pains in the abdomen as if one is pierced with a sharp instrument, is 'çula.' It is of 8 varieties: 1. wind-born, 2. bile-born, 3. phlegm-born, 4. born of wind and bile, 5. born of wind and phlegm, 6. born of bile and phlegm, 7. born of all the three faults, and 8. born of undigested food. Besides these eight, there are two other varieties, *viz.*, 'Parináma-çula' and 'Annadrava-çula'. All the varieties of the disease are exceedingly painful and difficult of cure.

Physical exercises, riding on horses and other animals or in carriages drawn by horses and other animals, excessive indulgence in sexual pleasure, night-keeping, drinking water that is very cold, eating such pulses as *Pisum Sativum*, *Phaseolus Mungo*,

Cajanus Indicus, the kind of rice called 'Koda', dry articles, food that is bitter, rice obtained from paddy whose sprouts have come out, food consisting of inharmonious ingredients, eating before the food last taken has been digested, suppressing the urgings of stools, urine, and wind, suppressing the emission of the vital fluid, grief, fasts, loud laughter, loud talk for a lengthened time, these and similar causes excite the wind and generate the wind-born variety of the disease. The symptoms that manifest themselves are pains in the chest, the sides, the back, the waist, and the rectum. The patient feels as if these parts are pierced with a thousand needles or as if they are breaking. Suppression of stools and the wind takes place. The disease gains in intensity after digestion has taken place of the food eaten. Its intensity increases also in the winter and the rainy seasons.

Eating food that largely consists of alkaline matter, or food that is of keen virtues, or that is very hot, or food that becomes acid in course of digestion, the variety of *Dolichos* called 'Smbi', sesame paste, the soup of *Dolichos biflorus*, articles that are pungent or sour, drinking wines or oils, wrath, exposure to heat of the sun or of fire, tiresome labour, excessive indulgence in sexual pleasure, these and other causes excite the bile and produce the bile-born variety of this disease. The usual symptoms are pains in the region of the navel, thirst, stupefaction, burning of the skin, sweat, swoons, vertigo, and a sensation of the nearness of fire. It gains in intensity during the midday, at midnight, while digestion goes on, and in the season of autumn.

Eating the flesh of aquatic animals or of animals that live in watery or marshy regions, inspissated milk, curds, the juice of sugarcane,

Bile-born cula.

Phlegm-born cula.

cakes of wheat flour or pounded rice, rice and pulses boiled together with ghee and spices, food largely consisting of sesame seeds, and other articles that are provocative of phlegm, excite the phlegm and produce this variety of the disease. The usual symptoms are pains in the 'ámáçaya', nausea or a tendency to vomit, cough, stupefaction of the body, watery secretions from the mouth and the nose, and a sense of the bowels being paralysed. The disease gains in intensity in the morning, as also in the winter and the spring seasons.

When through the respective causes that excite them all the three faults become provoked, they generate that variety of the disease in which the symptoms spoken of above manifest themselves in a combined form. This kind of çula is incurable and speedily proves fatal.

In that kind of çula which is born of undigested food or food-juice, the symptoms are a rumbling noise in the stomach or bowels, vomiting or a tendency to vomit, heaviness of the limbs, a sensation of the body being wrapped round with a wet cloth or blanket, suppression of stools and urine, and phlegmonous secretions, as also some or all the indications of the phlegm-born variety.

Amongst the difficult varieties of the disease, that which is born of wind and phlegm has its seat in the rectum, or the chest, or the back; while that born of bile and phlegm has its seat in the abdomen, the chest and the region of the navel. The 'çula' that is due to wind and bile, manifests itself in those places which are the seats of the wind-born and bile-born varieties. 'Cula' born of wind and bile

is accompanied, besides, by fever and a burning sensation of the skin.

Of the several varieties of 'çula', that which is born of one of the faults is curable ; that born of two faults is curable with difficulty ; that born of the three faults, especially 'çula' with such supervening symptoms as excessive pains, inordinate thirst, swoons, suppression of urine, heaviness of the body, fever, vertigo, disgust for food, weakness and emaciation, are incurable.

That 'çula' which manifests itself during digestion is named 'Parináma.' If one exposes oneself in a large measure to such causes as provoke the wind, then the wind, becoming excited, vitiates both the bile and the phlegm and leads to the development of this variety of 'çula.' If the wind predominates in this disease, the additional symptoms that manifest themselves are flatulence, a rumbling noise in the bowels, suppression of stools and urine, mental distress, and tremours. By taking oily and warm food and drink, this 'çula' becomes alleviated. If the bile predominates, thirst, burning of the skin, mental distress, and sweat, appear. Relief is obtained from cooling operations. This 'çula' is generated by food that is pungent, or sour, or saline. If there is predominance of the phlegm, the symptoms that manifest themselves are vomiting or a tendency to vomit, swoons, and pains that do not last long. This 'çula' arises from eating food that is pungent or bitter. When among its symptoms appear in a combined state the indications of two faults or three, 'Parináma çula' is regarded as born of two or three faults. If in 'Parináma çula' born of three faults, the patient's strength, flesh, and digestive fire be reduced or weakened, it then becomes incurable.

That 'çula' which manifests itself in an indefinite form after digestion has taken place, or while digestion is going on, or while the food in the stomach is in a raw state, is called 'Annadrava çula.' This 'çula' is never allayed by proper regimen. It is only when the food in the stomach is thrown out that some relief is felt.

As soon as this disease manifests itself, treatment should be commenced. If it be of long standing, cure cannot be expected. In wind-born 'çula' the application of 'sweda' on the stomach or abdomen brings relief. Take a quantity of earth ; dissolve it in water ; heat it on a fire till, by the evaporation of the water, the mixture becomes thick or nearly solid. With the boiled earth placed in a bag of cloth, 'sweda' should be applied to the seat of the pain. Or take the following articles, or as many of them as may be procurable, viz., cotton seeds, seeds of *Dolichos biflorus*, sesame seeds, barley, the roots of *Ricinus communis*, linseed, *Bærhavia diffusa*, and the seeds of *Crotalaria juncea* (Indian hemp) ; reduce them into a paste by pounding them with kánji ; the paste placed in a bag of cloth and heated on fire should be used for applying 'sweda.' This 'sweda' promptly relieves 'çula' when it manifests itself in the stomach or abdomen, the head, the elbows, the hips, the knees, the feet, the fingers, the calves, the shoulders, and the waist. Take the roots of *Ægle Marmelos* and *Ricinus Communis*, and sesame seeds ; pound them together with kánji and heating the paste on a fire make a ball of it. This ball, if rolled on the stomach or abdomen, relieves 'çula'. Wind-born 'çula' may also be relieved by a plaster applied on the stomach, made of *Cedrus deodara*, *Acorus calamus* (of the

white variety), *Aplotaxis auriculata*, dill seeds, assafœdita, and 'Saindhava' salt, pounded with kánji and heated' on a fire. Another plaster that may be applied with beneficial results consists of the roots of *Ægle Marmelos*, of *Ricinus communis*, of *Plumbago Zeylanica*, dry ginger, assafœdita, and 'Saindhava' salt. These should be pounded together and applied without being heated on a fire. The following drink may be given with advantage, viz., the decoction of *Sida cordifolia*, *Boerhavia diffusa*, the roots of *Ricinus communis*, *Solanum Indicum*, *Solanum Xanthocarpum*, and *Tribulus lanuginosus*, with a slight measure of assafœdita and 'Saindhava' salt thrown into it. The decoction of dry ginger and the roots of *Ricinus communis*, with a slight measure of assafœdita and 'Sanchál' salt relieves 'çula' very promptly. Take the following articles, in equal measures, viz., assafœdita, *Rumex vesicarius*, *Piper longum*, 'Sanchal' salt *Ptychotis Ajowan*, the ashes of barley spikes, Chebulic myrobalans, and 'Saindhava' salt; reduce them to powder. Four annas' weight of the powder, with fermented palm juice, may be given to the patient to drink. It relieves wind-born 'çula' speedily; or take the following, viz., assafœdita, *Rumex vesicarius*, dry ginger, *Piper longum*, pepper, *Ptychotis Ajowan*, 'Saindhava' salt, 'Sanchál' salt, and 'Vit' salt. Pound them together with the juice of *Citrus medica*, and give two or four annas of the paste to the patient. It relieves wind-born 'çula' very promptly.

In bile-born 'çula' the patient should be made to vomit by administering to him the paste of the leaves of *Trichosanthes dioica* or of *Melia Azadirachta* dissolved in milk, or water, or the juice of the sugarcane. If the bowels be constipated; the decoction of liquorice with a proper measure

Treatment of bile-born
'çula',

of castor oil should be given for purging the patient, or, the decoction of the three myrobalans and the pith of *Cassia fistula*, should be administered with a little measure of ghee and sugar. This relieves 'çula', burning sensation of the skin, and hæmoptysis. By drinking in the morning the juice of *Asparagus racemosus*, with honey, or the juice of the fruit of *Phyllanthas Emblica*, with sugar, or licking the pulv of the same fruit, mixed with honey, bile-born 'çula' is relieved. The burning sensation of bile-born 'çula' is relieved by drinking the decoction, cooled, of *Asparagus racemosus*, liquorice, *Sida cordifolia*, the roots of *Poa cynosuroides*, and *Tribulus lanuginosus*. Bile-born 'çula' of even the most intense kind, is effectually relieved by drinking the decoction of *Solanum Indicum*, *Solanum Xanthocarpum*, *Tribulus lanuginosus*, the roots of *Ricinus communis*, *Poa cynosuroides*, *Saccharum spontaneum*, and the variety of *Saccharum officinarum* called 'Ikshuváliká'.

In phlegm-born 'çula', the administration of emetics, and the observance of fast, form the chief treatment at the outset. If there is vitiation of 'áma' or food-juice, the following drugs, *viz.*, the tubers of *Cyperus rotundus*, *Acorus Calamus*, *Picrorrhiza kurroa*, Chebulic myrobalans, and the roots of *Sansevieria Zeylanica*, taken in equal measures, pounded together, and of the weight of four annas, should be given, dissolved in cow's urine, as a drink ; or take the fruit of *Piper longum*, the roots of the same, *Piper Chaba*, the roots of *Plumbago Zeylanica*, dry ginger, 'Saindhava' salt, 'Sanchál' salt, 'Vit' salt, and assafoedita, in equal measures, and reduce them to pulv. Two or four annas of the pulv, dissolved in warm water, or the pulv of the fruit of *Acorus Calamus*, the tubers of *Cyperus rotundus*, the roots of *Plum-*

Treatment of phlegm-born 'çula'.

bago Zeylanica, Chebulic myrobalans, and *Picrorrhiza kurroa*, of the weight of four annas, dissolved in cow's urine, may be given with advantage.

The treatment of 'çula', born of raw food-juice, is the same as that of the phlegm-born variety. Treatment of 'çula' born of raw food-juice. Besides the medicines prescribable in that variety, take the following in equal measures, viz., *Ptychotis Ajowan*, 'Saindhava' salt, Chebulic myrobalans, and dry ginger; reduce them to pulv. Four annas of this pulv, dissolved in cold water, should be given to the patient to drink. Those medicines which have been spoken of in the chapters on indigestion and loss of appetite, and which aid the digestion of the food-juice and increase the strength of the digestive fire, are also prescribable in this variety of 'çula'.

In 'çula' born of the three faults, the following medicine proves beneficial: 2 tolas of the juice of *Convolvulus paniculatus*, 2 tolas of the juice of ripe pomegranates; mix therewith 2 annas of honey and the same measure of the pulv of dry ginger, the fruit of *Piper longum*, pepper, and 'Saindhava' salt. The patient should drink it. Another efficacious medicine is 1 masha of the ashes of a conch-shell; 2 mashas of the pulv of 'Saindhava' salt, dry ginger, the fruit of *Piper longum*, and pepper, and 2 or 3 ratīs of assa-foetida; mixing them together, the compound should be dissolved in warm water and given to the patient to drink.

In 'Parináma çula' the decoction of the roots of *Ricinus communis*, of *Ægle marmelos*, *Solanum indicum*, *Solanum Xanthocarpum*, the roots of *Citrus medica*, *Colcus Ambonius*, and the roots of *Tribulus lanuginosus*, mixed with

the ashes of barley spikes, assafoedita, 'Saindhava' salt, and castor oil, should be given to the patient to drink. This medicine alleviates the pains in other parts of the body also. All kinds of 'Parináma çula' are relieved by the patient taking the pulv, in equal measures, of Chebulic myrobalans, dry ginger, and the impurity of iron, mixed with ghee and honey. 'Cambukádi-gudiká' and 'Nárikela-khára' form the best remedies of this disease.

In 'Annadrava-çula' the treatment should be like that of 'Amla-pitta'*. Our own 'çulanirvána-churna' alleviates all varieties of 'çula' promptly.

'Sámudrádyā-churna,' 'Tárāmandura-guda,' 'Catāvarimandura,' 'Vrihat çatāvarimandura,' 'Dhātrīlauha' (of both kinds), 'Āmalaki-khanda,' 'Nárikela-khanda,' 'Vrihat Nárikela-khanda,' 'Narikelāmrita,' 'Haritaki-khanda,' 'Sreevidyādhārābhra,' 'Culagajakēçari,' 'Culavajrini-vati,' 'Pippali-ghrita,' and 'Culagajendra-taila,' are some of the scriptural medicines which should be prescribed with discretion in all varieties of 'çulā.' The oil called 'Sreevilwa-taila,' mentioned in the chapter on the diseases of the Grahani, is an efficacious remedy in all varieties of 'çula.'

As long as the disease exists in vigour, rice should be avoided. Instead, milk and barley, or milk and sago, should be taken at daytime, and milk and fried paddy at night. If vomiting, fever, intense burning, and excessive thirst supervene in bile-born 'çula,' the 'peyá,* mixed with honey, of barley, should be given to the patient to drink.

* By 'Amla-pitta,'—literally, sour bile,—is meant dyspepsia with vomiting or purging, including hæmatemesis of cancer, pyrosis, and acidity.

Our own 'Sanjiban-khádya', even if taken during the period of the disease in its intensity, does great good. When the intensity of the disease has abated, old rice, well boiled, may be taken during the day, with the soup of 'Mágura', 'Koi', 'Singhi,' and 'Mauralá' and other varieties of small fish, and curries of such vegetables as *Colocasia Indica*, *Arum cumpanulatum*, *Trichosanthes dioica*, brinjals, *Ficus glomerata* (of the smaller variety), ripe fruit of *Cucurbita pepo* (of the country variety), the cods of *Moringa pterygosperma*, *Momordica chrantia* (of the larger variety) plantain flowers, &c. Among fruits, those of *Phyllanthus Emblica*, *Ægle Marmelos*, grapes, ripe 'Pepiya', unripe and ripe cocoanuts, as also the bulbous roots of *Scirpus Kysoor*, may be taken. Warm milk, bitter articles, the water of fresh or unripe cocoa nuts, and assafoedita may be taken. The curries should all be prepared with 'Saindhava' salt. The patient should take as little of curries as he can. Indeed, if he can take only rice, without any curries, he is sure to derive much benefit. The evening meals should consist of the 'manda' of barley, milk and barley, milk and sago, milk and fried paddy, or our 'Sanjiban-khádya'. For tiffin the confectionery prepared with *Cucurbita pepo* of the country variety, sweets made with cocoanuts and the fruit of *Phyllanthus Emblica*, are prescribable. In this disease, the patient should never drink immediately after meals; he should wait at least two hours. He may bathe in cold water or warm water as he can bear. All kinds of rich food, eating in excessive measure, all kinds of pulses, pot-herbs, large fishes, curds, dry,

* 'Yavágu' is gruel of rice, or barley, &c., The grains are reduced to powder and then boiled in water. It is made of three strengths, viz., with nine, eleven, or nineteen parts of water, called respectively, 'Vilepi,' 'Peyá', and 'Manda.'

astringent, and cold articles, articles that are sour, chillies, strong wines, exposure to the heat of the sun or of fire, toil, sexual pleasure, indulgence in grief and wrath, suppressing the urgings of stools and urine, and night-keeping should be avoided. These are especially beneficial in 'çula.'

INTESTINAL AND OTHER KINDS OF OBSTRUCTIONS.*

All those diseases which are generated by the suppression of the urgings or escape, of the wind, of stools, of urine, of yawns, of tears, of sneezing, of eructations, and of the vital seed, the suppression also of hunger, of thirst, of sighs and long breaths, and of sleep, are known by the name of 'Udāvarṭta.'

By suppressing the downward wind, the stools and urine and the downward wind itself become suppressed. Flatulence of the stomach also succeeds. The other symptoms are langour, pains in the stomach or in every part of the body, and the appearance of diverse diseases of the nervous system. If the urging of stools is suppressed, the symptoms that supervene are a rumbling noise and 'çula' in the stomach, cutting pains in the rectum, entire suppression of stools, and eructations. Sometimes the patient is seen to vomit stools which are unable to escape through the usual passage. The suppression

* These diseases are known in Sanskrit medicine by the names of 'Udāvarṭta' and 'Anāha'. Suppression of stools and urine is certainly included in them. The fact is, intestinal and other kinds of obstructions are meant.

of the urging of urine causes 'çula' in the kidneys and the genital organ, headaches, and griping pains in the groins. The patient passes urine with difficulty. Not unfrequently is the urine totally stopped. The urging of yawns, being checked, gives rise to diseases of the head, the eye, the ear, the nose, and the face. Wry neck and inflammation of the throat are the other results of checking the urgings of yawns. A check of the urgings of sneezing is seen to beget wry neck, 'çula' in the brain, facial paralysis, hemicrania, and a general debility of all the organs of sense. Suppression of the urgings of eructations causes the sensation of a fulness of the throat and the mouth. The other symptoms that appear are pain in the heart and 'Āmāçāya,' as acute as that caused by pricking with needles, painful or difficult breathing, indistinctness of voice, disgust for food, chlorosis, fever, nausea, and erysipelas. Even such skin diseases as itches, black spots on the face, and urticaria evanida and swellings of various types, are seen to arise. By suppressing the urgings of semen the patient gets swelling and pain in the kidneys, the rectum, and the testicles. Moreover, the urine also is stopped. Stone and gonorrhœa, and various sorts of diseases due to the retention of urine, difficult to grapple with, also supervene. If hunger be checked by one's declining to eat at the time one feels hungry, one feels tired and drowsy. Langour of the body, disgust for food, and weakness of vision, also occur. By checking thirst, one gets sores in the throat and the mouth, pains in the heart, and loss of hearing. If one suppresses heavy and long breath brought on by toil, one gets diseases of the chest, swoons, and abdominal tumours. Sleep being checked causes yawning, prostration of the body, heaviness of the eye, and of the head, and drowsiness.

Besides these sorts of flatulence there is another caused by the excitement of the wind in the stomach due to the taking of food that is dry or sour, or pungent, or bitter. The wind, thus excited, envelops and dries up the downward wind, the urine, the stools, the blood, and the phlegm-bearing and fat-bearing ducts. The consequence is a pain in the chest and the rectum, severe nausea, and difficulty in passing the downward wind, urine and stools. Gradually asthma, bronchitis, catarrh in the nose, burning of the skin, swoons, thirst, fever, vomiting, hiccup, diseases of the head, wandering of the mind, derangement of the sense of hearing, and various other wind-born diseases appear.

When in consequence of the vitiated wind, raw food-juice accumulates in the system without being transformed, and stools also accumulate without escaping, the disease is called 'Ānāha' or epistasis. In the disease, caused by undigested food-juice, the symptoms that appear are thirst, catarrh in the nose, burning sensation in the head, 'çula' and heaviness of 'Amāçaya,' stiffness of the chest, and eructations. In epistasis caused by constipation and accumulation of stools in the bowels, the waist and back of the patient becomes stiff. The urine and stools also are stopped. The downward wind is checked. 'Cula,' swoons, vomiting of stools, inflammatory swellings, flatulence, and many of the symptoms of tympanites appear.

The general treatment of all sorts of 'Udāvarṭta' is the restoration of the wind to its normal course. In 'Udāvarṭta' caused by suppression of the downward wind, the patient should drink medicated oils, and use enemata.

Besides, 'sweda' should be applied. The following preparation proves beneficial ; take the fruit of *Randia dumetorum*, *Piper longum*, *Aplotaxis auriculata*, *Acorus calamus*, and mustard seeds of the white variety, in equal measures. Add treacle equal to the total measure of the preceding ingredients. Dissolving the treacle only in water, boil it on a fire. After the boiling is over, cast into it a little milk and the pulv of the aforesaid drugs. Make sticks of the paste thus formed. These sticks are known as 'Phalavartti' (fruit-sticks.) By using these sticks as enemata all varieties of 'Udávartta' may be relieved. In 'Udávartta' caused by suppression of the urgings of stools, purgatives, 'fruit-sticks,' the rubbing of oil on the body, baths by plunging the whole body in water, 'sweda,' and enemata should be resorted to. In that variety of the disease caused by suppressing the urgings of urine, the decoction of the bark of *Pentaptera Arjuna*, and the seeds of *Cucumis Melo* reduced to powder and dissolved in water with a little salt in it, or the pulv of the fruit of *Acorus calamus*, should be given to the patient. All the medicines prescribed for epistasis and calculi may be administered in this disease. In that variety of 'Udávartta' which is caused by suppressing the urgings of ywaning, medicated oils, 'sweda,' and all the operations that alleviate the wind should be relied upon. In 'Udávartta' caused by checking tears, strong or keen collyria should be applied for inducing a copious discharge of tears which alone can relieve the patient. In the variety caused by suppressing sneezing, errhines made of pepper and other drugs of keen virtues should be administered. Or, for inducing sneezing, the patient may be made to look at the sun. In the variety caused by suppressing eructations, the following medicine proves efficacious : take *Tinospora cordifolia*, *Convolvulus*

paniculatus, *Physalis flexuosa*, and *Asparagus racemosus*, two parts, and *Phaseolus trilobus*, *Glycine debilis*, *Cælogyne ovalis*, and liquorice ; pounding these together, mix the result with tallow and ghee and wax. Make sticks of the paste thus formed. The patient should drink the smoke of the sticks like cigars. In 'Udāvartta' caused by suppressing the urgings of vomiting, the observance of fasts, use of purgatives, and the rubbing of oil on the body prove beneficial. In that variety of the disease which is caused by suppressing the emission of the vital seed, the remedies adopted are indulgence in sexual congress, the rubbing of oil on the body, baths by plunging the whole body in water, drinking of wine, use of 'meat-juice' and other nourishing diet. Another remedy consists of the paste of the five-fold roots of *Saccharum*, or milk boiled with four-times as much of water till the entire measure of water has evaporated. In that form of the disease which is brought on by checking hunger, the patient should be given oily, lukewarm and savoury food, little by little. Boiled rice of the best kind, with ghee and lemon juice is preferable. Inhaling of the perfume of fragrant flowers also proves beneficial. In 'Udāvartta' caused by suppressing thirst, cool water perfumed with camphor, or iced water, or gruel of powdered rice, wheat, or barley, should be given to the patient to drink. Besides these, all cooling operations should be adopted. In that form of 'Udāvartta' which is generated by suppressing long and heavy breath after toil, thorough rest and food with meat-juice are recommended. In the form of the disease caused by checking sleep, milk, in which sugar is dissolved should be given to drink. Moreover, the patient should be enticed to sleep by shampooing, placing him on a soft bed, and such other means. In 'Udāvartta' caused by eating articles of kṛcch

virtue, 'fruit sticks' mentioned above are highly efficacious. Sticks made of the paste of assafœdita, honey, and 'Saindhava' salt, powdered together may be used, instead, as enemata with benefit.

In the disease known as 'Anáha', the treatment consists of the restoration of the wind to its normal course by the use of enema and enemata, and the adoption of other operations as are beneficial in 'Udávartta.' The following medicine also alleviates the disease: take *Convolvulus Turpethum*, reduced to pulv, 2 parts; *Piper longum*, 4 parts; and Chebulic myrobalans, 5 parts. Add treacle equal in measure to the total quantity of the preceding drugs. Grind all these together. This preparation is sure to cure the disease. The dose should be four-annas or half-a-tola. *Acorus Calamus*, Chebulic myrobalans, the roots of *Plumbago Zeylanica*, ashes of barley, *Piper longum*, *Aconitum Heterophyllum*, and *Aplotaxis auriculata*, taken in equal measures, and reduced to pulv, may be used with benefit, the dose being two to four annas. Besides these, the following medicines should be applied both in 'Udávartta' and 'Anáha': 1. 'Náracha-churna,' 'Gudáshtaka,' 'Vaidyanáthavati,' 'Vrihat-Ichchavedi-rasa,' 'Cushka-muládyā-ghrita,' and 'Sthirádyā-ghrita'. Our own 'Saralabhedi-vatiká,' acts as a mild purgative and proves highly beneficial both in 'Udávartta' and 'Anáha.'

In both 'Udávartta' and 'Anáha' such food and drink should be taken as alleviate the excited wind. Old 'cáli' rice of the finer varieties, properly boiled, should be given, while warm, with ghee. Soup made of 'Koi,' 'Mágura,' 'Singi' and 'Maurolá,' and other fishes classed as

Treatment of Anáha or Epistasis.

Diet and forbidden practices.

small, as also of goat's meat, and the vegetables spoken of as prescribable in 'çula', and milk, are beneficial. The patient may also take sherbet of sugar-candy, the water of unripe cocoanuts, ripe 'pepiyas', custard apples, sugar-cane, &c. If the patient feels hungry, his evening meals also may consist of old rice of the same kind. If the appetite be not keen, milk and sago, or the 'manda' of barley, or milk and fried paddy, or a little of wheat-flour fried in ghee and boiled in milk and water, may be taken. He may bathe in warm water or cold water according to his capacity of bearing it. The rubbing of oil on the body, as also enjoyment of the after-noon breeze, are beneficial in this disease. Food that is heavy and difficult of digestion or that is possessed of keen properties, or that is dry, night-keeping, toil, physical exercises, journeys on foot, indulgence in wrath or grief, or anything that disturbs the equanimity of the mind, should be carefully avoided,

ABDOMINAL AND OTHER INTERNAL TUMOURS.

Internal tumours, hard and knotty, and of a round or globular form, in the thorax, the sides, the abdomen or the region about the navel, and the rectum, are called 'Gulma'. The incubatory symptoms are frequent or excessive eructations, stoppage of stools and urine, unwillingness or disgust for food, weakness, flatulence, pains in the stomach, rumbling noise in the bowels, and loss of appetite. 'Gulma' is of five kinds : 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the faults, and 5. blood-born. The general symptoms of this disease are difficulty in

passing stools and urine and the downward wind, disgust for food, rumbling noise in the bowels, epistaxis, and the upward motion or course of the wind. These symptoms manifest themselves in every variety of 'Gulma'.

Eating excessively one day and sparingly the next, and at irregular intervals also, food that is dry, wrestling with stronger men, suppressing the urgings of stools and urine, indulgence in grief, wounds, excessive purging owing to the use of strong purgatives, and observance of fasts, lead to the appearance of wind-born 'Gulma'. This 'Gulma' is very mobile. It is seen sometimes in the rectum. Its size also changes; sometimes it is large; at other times small. Sometimes it seems to be round and at other times long. The other symptoms that usually appear are various kinds of pain more or less intense, suppression of stools and urine and the downward wind, dryness of the mouth and the throat, darkness or redness of complexion, cold fever and severe pains in the chest, the abdomen, the shoulders, and the head. After digestion has taken place, the disease gains in intensity. As soon as food enters the stomach, the disease becomes scarcely perceptible.

Eating food that is pungent, or sour, or of keen virtues, or hot or burning (because of its conversion into acidity while digestion goes on), or dry, indulgence in wrath, excessive drinking of wines and alcoholic stimulants, excessive exposure to heat of the sun or fire, excessive accumulation of raw food-juice owing to indigestion characterised by acidity, and vitiated blood, lead to the appearance of bile-born 'Gulma.' The usual symptoms are fever, thirst, a redness of the whole body, especially of the face, intense pain while

Causes and symptoms of
wind-born Gulma.

Causes and symptoms of
bile-born Gulma.

digestion is going on, copious perspiration, burning, and excessive sensibility of the seat of 'Gulma.' Sometimes, though rarely, this 'Gulma' may be seen to suppurate after inflammation.

Eating food that is cool or difficult of digestion, or oily, absence of physical labour, gorging the stomach, and sleep during daytime, generate phlegm-born 'Gulma.' The usual accompaniments are a sensation of the body being wrapt round by a wet cloth or blanket, cold fever, stupefaction of the whole body, nausea and urging to vomit, cough, disgust for food, heaviness of the limbs, sensation of cold, and partial pain. The 'Gulma' becomes hard and rises above the surface of the body.

If one exposes oneself to such causes as excite two of the faults, 'Gulma' born of two faults may present itself. The symptoms manifested are those, in a combined state, of each separate variety of the disease. The same observations apply to 'Gulma' that is regarded as born of all the three faults. The presence, at the same time, of the causes that excite each of the three faults, generates this variety of 'Gulma'. Its symptoms also are those of each separate variety in a combined state. 'Gulma' born of the three faults is characterised by intense pain. It becomes as hard as stone. It rises above the surface of the body. It is accompanied by great mental perturbation. The body is reduced, and the digestion is impaired. It is incurable.

'Gulma' born of blood afflicts women only. If a woman, after abortion of an undeveloped foetus, or after delivery at the proper time, or during the continuance of the

Causes and symptoms of phlegm-born Gulma.

Symptoms of Gulma born of two or all the three faults.

Causes and symptoms of Gulma born of blood.

menses, indulges in such food and drink or such acts as excite the wind, the consequence is that the excited wind vitiates the menstrual blood and generates blood-born 'Gulma' within the uterus. The symptoms are excessive burning, pain, and many of the indications of bile-born 'Gulma.' Besides, stoppage of the menstrual blood, yellowness of the face, darkness of the nipples of the breast, the oozing of milk from the breasts, desire for eating diverse articles, watery secretions from the mouth, dulness of both body and mind, and other indications of pregnancy, may be noticed. In actual pregnancy, no pain is felt while the fœtus moves in the womb. Nor does the entire fœtus move at the same time, for what happens is that the child sometimes moves its hands only, and sometimes its legs, &c. In blood-born 'Gulma,' however, it is the entire 'Gulma' that moves about, causing much pain.

If 'Gulma' is allowed, from neglect, to accumulate or increase till it extends to the entire
Incurable and fatal Gulma. abdomen, if it affects the juices and the blood, if it is penetrated by arteries and nerves, and if it presses upwards like the back or shell of a tortoise, and if it is accompanied by weakness or loss of strength, disgust for food, nausea, vomiting, cough, mental distress, fever, thirst, drowsiness, and watery secretions from the mouth and the nose, it then becomes incurable. If inflammatory swellings appear on the chest, the navel, the hands, and the feet of a person suffering from 'Gulma,' and if fever, asthma, vomiting, and diarrhœa, or asthma, 'çula,' thirst, disgust for food, loss of strength, and the sudden absorption or disappearance of the 'Gulma,' occur, then death is seen to carry off the patient soon.

In all varieties of 'Gulma' the treatment at the outset should be the alleviation of the excited wind. Even where it cannot be ascertained as to what the particular fault is that has generated the 'Gulma' owing to the symptoms of that fault not having manifested themselves clearly, the treatment should still consist of administering such medicines and adopting such operations as alleviate the excited wind. If the wind be alleviated, the alleviation of the other faults will readily follow. Milk, castor oil with the pulv of Chebulic myrobalans, and medicated oils and ghees, as also the operation of 'sweda', prove beneficial in wind-born 'Gulma.' 'Sarjjikshāra' (carbonate of soda), 2 māsāhās, *Aplotaxis auriculata*, 2 msāhās, and the ashes of the matted tops of *Pandanus odoratissimus*, mixed with castor oil, alleviate wind-born 'Gulma.' Dry ginger reduced to pulv, 4 tolas, black sesame seeds, reft of husks, 16 tolas, and old treacle, 8 tolas, should be pounded together. Half a tola, or one tola of the paste should be administered with warm milk. This alleviates wind-born 'Gulma', flatulence, and 'çula' that afflicts the generative organ of women. In bile-born 'Gulma,' purgatives are beneficial. The pulv of *Convolvulus Turpethum*, mixed with the decoction of the three myrobalans, as also the pulv of Chebulic myrobalans mixed with old treacle, by purging the patient, alleviates bile-born 'Gulma.' If burning 'çula', mental distress, loss of sleep, restlessness and fever, supervene, it should be known that the 'Gulma' is on the point of ripening and suppurating. At this time such medicines should be applied as aid the maturing and suppuration of abscesses. When suppuration has taken place, the treatment to be followed should be like to that which is adopted in deep-seated internal abscesses.

Treatment of wind-born
Gulma.

In phlegm-born 'Gulma', vomiting, by administering emetics, fasts, and 'sweda' are needed. If loss of appetite, partial pain, a sense of heaviness in the abdomen, a sense of the body being wrapped round with a wet cloth or blanket, nausea and disgust for food, be the supervening symptoms, emetics should be given and the patient be made to vomit. The decoction of the barks of the roots of *Ægle Marmelos*, *Bignonia Indica*, *Gmelina arborea*, *Bignonia Suaveolens*, and *Premna Serratifolia*, produces beneficial results in phlegm-born 'Gulma'. The pulv of *Ptychotis Ajowan*, and 'Vit' salt, administered with whey, increases the digestive fire, and restores to the downward wind, the stools, and the urine, their normal course. In phlegm-born 'Gulma', by applying a plaster, over the seat of the 'Gulma,' made of sesame seeds, reduced to a paste, and then applying 'sweda' over the plastered part with a heated plate of iron, beneficial results may be expected. Another efficacious medicine consists of the following: assafœdita, *Aplotaxis auriculata*, coriander seeds, Chebulic myrobalans, the roots of *Convolvulus Turpethum*, 'Vit' salt, the ashes of barley spikes, and dry ginger, should be fried in ghee and reduced to pulv. Two to four annas of this pulv, administered with the decoction of barley, relieves 'Gulma' as also all the supervening symptoms. Carbonate of soda, half a tola, and old treacle, half a tola, should be pounded together. Half a tola of the pounded product relieves 'Gulma.' As regards blood-born 'Gulma,' the treatment should be commenced after the eleventh month of its appearance. This disease becomes easily curable when old. At the outset, medicated oils and ghees should be given to the patient to drink. The operation of 'sweda' should also be adopted, as also the administration of oily purgatives. Dill seeds, the bark of *Guilandina Bon-*

ducella, *Pinus deodara*, *Siphonanthus Indica*, and *Piper longum*, should be taken in equal measures and pounded together, and then administered with the decoction of sesame seeds. This medicine alleviates blood-born 'Gulma.' Another efficacious medicine consists of the decoction of sesame seeds, mixed with old treacle, a little assafœdita and *Siphonanthus Indica*, reduced to pulv. By drinking the juice of the fruit of *Phyllanthus Emblica*, mixed with pepper reduced to pulv, the patient derives great benefit.

'Hingádi-churna,' 'Vachádi-churna,' 'Vajrakshára,' 'Danti-haritaki,' 'Kánkáyana-gudiká,' 'Pañ-chánana-rasa,' 'Gulmakálánala-rasa,' 'Tryushanádya-ghrita,' 'Nárácha-ghrita,' 'Tráyamánádya-ghrita,' and such wind-alleviating oils as 'Swalpa-vishnu-taila' and others, should, with discretion, be administered in 'Gulma.'

Generally, all those articles which alleviate the excited wind, form the best food in this disease. Old 'çáli' rice of the finer varieties, ghee, the meat of francoline partridges, cocks and hens, cranes, and other nourishing birds, and curries of all such vegetables as have been mentioned in the chapter on 'çula,' should be taken during the day. The evening meals should consist of 'puris' or 'chapatis,' wheat flour fried in ghee and then boiled in milk and water with sugar, and milk. The water of fresh and unripe cocoanuts, sherbet of sugarcandy, ripe 'pepiyas,' ripe mangoes, custard apples, and other kinds of delicate and oily fruits, may be taken. The patient derives benefit from taking baths in cold or warm water according

Diet and forbidden practices.

In bile-born and phlegm-born 'Gulma,' those articles which, without exciting

the bile or the phlegm, operate beneficially on the wind, should be prescribed. Old 'çáli' rice of the finer varieties, ghee, the meat of francoline partridges, cocks and hens, cranes, and other nourishing birds, and curries of all such vegetables as have been mentioned in the chapter on 'çula,' should be taken during the day. The evening meals should consist of 'puris' or 'chapatis,' wheat flour fried in ghee and then boiled in milk and water with sugar, and milk. The water of fresh and unripe cocoanuts, sherbet of sugarcandy, ripe 'pepiyas,' ripe mangoes, custard apples, and other kinds of delicate and oily fruits, may be taken. The patient derives benefit from taking baths in cold or warm water according

to what he can bear. The bowels should be kept clean in this disease. Too much labour, journeys on foot, night-keeping, exposure to the sun, sexual indulgence, and all such acts as excite the wind, should be avoided. All such food and drink also as are provocative of the wind should be abstained from.

HEART-DISEASE.

Eating food that is hot, or difficult of digestion, or of an astringent or bitter taste, toil, wounds on the chest, eating anew before the food last taken has been digested, suppressing the urgings of stools and urine, and continued anxiety, generate heart-disease. Pain in the heart or the cardiac region, and continued throbbing in the heart, are its general symptoms. This disease is of five kinds: 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the faults, and 5. that born of worms.

In the wind-born variety of this disease the sensation is felt of the heart being dragged out forcibly, of its being pierced with a hundred needles, or thrashed with clubs, or cut with weapons, or mangled with spikes, or repeatedly struck with an axe. In heart-disease born of bile, the patient feels heaviness in the heart, pain in the whole body, internal heat, burning, thirst, the sensation of vapours being exhaled by the mouth, swoons, perspiration, and dryness of the mouth. In the phlegm-born variety, the symptoms are heaviness of the limbs, phlegmonous secretions, disgust for food, dulness of both body and mind, loss of appet-

and the presence of a sweet taste in the mouth. In heart-disease born of all the faults, the symptoms of the aforesaid varieties manifest themselves in a combined form. If after the appearance of that variety of the disease which is born of all the faults, the patient takes in excessive measure sesame seeds, or milk, or treacle, or any other article that generates worms, the consequence that generally happens is a knotty growth in the chest from which fetid secretions issue. Soon worms are generated in that fetid matter. The result is heart-disease that is regarded as worm-born. The symptoms that manifest themselves are keen pain in the heart as if it were pierced with needles, a tickling sensation, nausea, phlegmonous secretions from the mouth, 'çula', escape through the mouth of the juices that accumulate in the chest, vision of darkness, disgust for food, a dark hue of the eyes, and a swelling of the eyes and eye-lids. Some of the symptoms that supervene are a sense of fatigue, stupefaction of the whole body, and vertigo, which are the usual indications of phlegm-born worms.

In heart-disease the administration of medicines that increase the digestive fire and the measure of blood forms the chief treatment. The pulv, measuring 2 annas, of the bark of *Pentaptera Arjuna*, with ghee or milk or water in which a little treacle has been dissolved, alleviates heart-disease, mature fevers and hæmorrhage (Rakta-pitta). That variety of the disease which is born of wind is considerably relieved by the following medicine : take *Aplotaxis auriculata*, the roots of *Citrus medica*, dry ginger, *Circuma Zerumbet*, and Chebulic myrobalans, in equal measures ; pound these together, and mix the paste with milk, 'kânji', ghee, and salt. Another medicine that alleviates heart-disease consists of

these ; Chebulic myrobalans, *Acorus Calamus*, *Vanda Roxburghii*, *Piper longum*, dry ginger, *Circuma Zerumbet*,^{*} and *Aplotaxis auriculata* taken in equal measures and reduced to pulv. The dose should be 2 to 4 annas, and it should be taken with water. In bile-born heart-disease the following medicine proves beneficial : milk in which have been boiled the bark of *Pentaptera Arjuna*, the lesser group of the five roots, and *Sida cordifolia* or liquorice. This milk should be given with sugar. In the phlegm-born variety of the disease, the pulv of *Convolvulus Turpethum*, *Circuma Zerumbet*, *Sida cordifolia*, *Vanda Roxburghii*, Chebulic myrobalans, and *Aplotaxis auriculata*, taken in equal measures and administered with cow's urine, proves beneficial. The dose should be from 2 to 4 annas. *Elettaria cardamomum* (of the smaller variety), and the roots of *Piper longum*, reduced to pulv and mixed with ghee forms a good linctus which relieves phlegm-born heart disease. Not more than 2 annas of this pulv is required to form a linctus. Heart-disease born of all the three faults is relieved by 2 annas of the pulv of assafœdita, *Acorus calamus*, 'Vit' salt, dry ginger, *Piper longum*, Chebulic myrobalans, the root of *Plumbago seylanica*, ashes of barley spikes, 'Sanchál' salt, and *Aplotaxis auriculata*, taken in equal measures, and administered with the decoction of barley. In worm-born heart-disease, *Embellia Ribes*, and *Aplotaxis auriculata*, reduced to pulv, and given to the patient with cow's urine to drink, produce good results. The dose should be 2 annas of the pulv. The medicines laid down for worms may be administered in this disease. Some of the scriptural medicines are 'Kakubhádi-churna,' 'Kalyána-sundara-rasa,' 'Chintámani-rasa,' 'Hridayánavá-rasa,' 'Viçweçwara-rasa,' 'Cwadangshtrádyá-ghrita,' and 'Arjuna-ghrita.' These

produce the most beneficial results. 'Vrihat-cchágáládyaghrita' also is prescribed in this disease.

If the chest receives wounds or any sort of violence,

Treatment of pain in the chest born of other causes.

pain arises that should not be confounded with heart-disease. Before, again, the appearance of cough or bronchitis, as also hemorrhage from excitement of bile and the increase of blood, the chest becomes the seat of pain which also should be distinguished from heart-disease. For alleviating these pains, turpentine should first be rubbed on the chest and then fomentation should be applied with a piece of flannel or blanket or other warm cloth drenched in the decoction of opium seeds and then dried by twisting. A plaster made of ginger, 2 parts, and 'átapa' rice, 1 part, pounded together and heated, proves beneficial. A linctus may be made of the pulv of *Aplotaxis auriculata*, mixed with honey. the decoction of the ten roots, with 'Saindhava' salt and The ashes of barley spikes, forms a good drink. 'Lakshmi-vilása' for internal administration, and 'Mahádaçamula-taila' or the 'Chandanádi-taila' mentioned under cough and bronchitis, for rubbing on the chest, are efficacious medicines.

Oily and nourishing food, but such as is light and easy

Diet and forbidden practices.

of digestion, is prescribable in heart-disease. If fever and other symptoms do not supervene, then the diet prescribable in nervous diseases should be prescribed in this ailment also. In mere pains of the chest, the diet laid down for cough or bronchitis, and hemorrhage due to excited bile, should be taken. The eating of dry food, or food that excites the wind, fasts, toil, night-keeping, exposure to the sun or fire, and sexual indulgence should be abstained from.

STRANGURY AND RETENTION OF URINE.

That disease which is characterised by painful micturition is known by the name of 'Antrakrichchra' or strangury. Eating articles that are of keen virtues, taking medicines that are of keen potency, the use of food that is dry, drinking dry wines, the meat of animals that live in sandy deserts or regions without water and vegetation, eating before the food last taken has been digested, disgust for food, physical exercises, riding on horses or other swift animals, or in cars and vehicles drawn by such animals, suppression of the urgings of stools and urine, and similar causes generate this disease. Strangury is of eight varieties ; 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the three faults, 5. accidental, 6. stool-born, 7. that born of calculi, and 8. that born of the vital-seed.

In wind-born strangury there is excessive pain in the groins, the rectum, and the pennis, and the urine comes out repeatedly in small quantities. In the bile-born variety, the urine becomes yellow or red. Micturition is frequent and accompanied by pain and a burning sensation. In the phlegm-born variety, a sensation of heaviness is felt in the pennis and the rectum. There is also a slight inflammatory swelling. The urine becomes slimy. In that strangury which is born of all the faults, the above symptoms manifest themselves in a combined form. That strangury which results from some wound or violence to the urethra, is regarded as accidental. The symptoms that appear are those of the wind-born variety of the disease. By suppressing the urgings of stools a kind of strangury is generated accompanied by flatulence of the stomach and 'çula'. This

is called stool-born strangury. That difficulty of micturition which results from the formation of calculi in the bladder, is known as born of calculi. The symptoms that appear are pain in the chest, shivering, 'çula' in the abdomen, loss of appetite and swoons. If the vital seed, becoming vitiated, comes to or occupies the ducts through which the urine passes, the result is a kind of strangury which is accompanied by severe pain in the rectum and pennis. Micturition becomes very difficult.

If the urine be totally suppressed, or if obstructions arise in course of its flow, the disease is called 'Mutrágháta'. In passing the urine, there is less pain in this

Symptoms of 'murtágháta' or retention of urine.

disease than in strangury. This disease arises sometimes from 'Prameha' * The urine comes out by drops, accompanied by blood. There is inflammatory swelling in the urethra. Flatulence of the stomach, severe pain, the appearance of growths like stone or calculi in the rectum, thickness of the urine, the smell or the presence of stools in the urine, and displacement of the kidneys, are the other symptoms of this disease. All varieties of this ailment are painful.

In wind-born stangury, the patient should drink the decoction of *Tinospora cordifolia*, dry ginger, the fruit of *Phyllanthus Emblica*, *Physalis flexuosa*, and *Tribulus lanuginosus*, mixed with honey. In strangury born of bile, the juice of *Asparagus racemosus*, mixed with sugar, should be drunk. The seeds of *Cucumis utilisissimus*, liquorice, and *Berberis Asiatica*, reduced to powder, and dissolved in water in which 'átapa' rice has been washed, or the pulv of *Berberis Asiatica*,

* It is a general name for several kinds of urinary disease. It includes diabetes, gonorrhoea, &c.

mixed with honey and the juice of the fruit of *Phyllanthus Emblica*, relieve this variety of the disease. Another efficacious medicine is the páchana called 'Catávarshyádi,' or that called 'Haritakyádi.' In that variety of the disease which is born of phlegm, the seeds of *Alternanthera Sessilis*, mixed with whey, or corals reduced to powder and dissolved in water in which 'átapa' rice has been washed, or the decoction of *Tribulus lanuginosus* and dry ginger proves beneficial. In strangury born of the three faults, the decoction should be given of *Solanum Indicum*, *Solanum Xanthocarpum*, *Cissampelos hernandifolia*, liquorice, and the seeds of *Holarrhena antidiysenterica*. The treatment of that variety of the disease which is classed as Accidental should be the same as that of the wind-born variety. By drinking the decoction of the seeds of *Tribulus lanuginosus*, into which has been thrown a small measure of the ashes of the green spikes of barley, stool-born strangury is relieved. In that variety of the disease which is born of calculi, the decoction, or pulv, of these, viz, the seeds of *Tribulus lanuginosus*, the exudation of *Cassia fistula*, *Poa cynosuroides*, *Saccharum spontaneum*, *Hedysarum Alhagi*, *Colcus Amboinicus*, and Chebulic myrobalans, mixed with honey, proves beneficial. This variety of strangury yields also to only the juice or the decoction of *Colcus Amboinicus*. In that variety of the disease which is born of the semen, 'çilájatu' mixed with honey should be given. All varieties of strangury may be relieved by these medicines: 1. the decoction of *Sida alba*, 2. the ashes of the green spikes of barley, mixed with honey, 3. Sulphur mixed with honey, 4. the ashes of barley spikes mixed with sugar, 5. the juice of *Cucurpita Pepo* mixed with the ashes of barley spikes and sugar, 6. the decoction of the fruit of

Phyllanthus Emblica, mixed with treacle, and 7. the seeds of *Cleome Viscosa*, reduced to paste by being pounded with water drawn at least a day before from a well, tank, or river. Bloody urine may be relieved by the following, viz., cocoanut flowers pounded into a paste and dissolved in water in which 'átapa' rice has been washed. Besides these, the scriptural medicines are the decoction called 'Eládi,' the páchanas called 'Dháttryádi' and 'Vrihat-dháttryádi,' 'Mutrakrichchhrántaka-rasa,' 'Tárameçwara-rasa,' 'Varunádyalauha,' 'Kuçávaleha,' 'Sukumára-kumáraka-ghrita,' and 'Trikantakádyá-ghrita.' These may, with discretion, be administered in all varieties of strangury.

In retention of urine, the medicines that alleviate strangury and calculus should be prescribed with discretion. In this disease, a plaster applied to the navel, of the roots of *Coccinia Indica*, pounded into a paste with kánji, produces beneficial results. Camphor reduced to pulv, should be inserted into the urethra. By drinking the water that flows from the fruit of *Cucurbita Pepo*, mixed with sugar and the ashes of barley spikes, the patient derives considerable benefit. Another efficacious medicine consists of the roots of *Vitis pedata* (syn. *Cissus pedatus*) taken with ghee, or oil, or whey. By drinking warm water in which have been dissolved the pulv of the seeds of *Cucumis utilissimus*, that of 'Saiudhava' salt, and that of the three myrobalans, all taken in equal measures, much benefit is derived. The scriptural medicines are 'Chitrakádyá-ghrita,' 'Dhányago-kshuraka-ghrita,' 'Vidári-ghrita,' 'Cilodbhidádi-taila,' and 'Ushirádyá-taila.' They prove highly beneficial in strangury, retention of urine, calculi, and other diseases connected with the urethra.

All kinds of oily and nourishing diet are beneficial in this disease. The meals during day-time should consist of old rice, soup made of fishes classed as small, and juice of the meat of fowl and goats. Such vegetables as brinjals, *Trichosanthes dioica*, *Ficus glomerata* (of the smaller variety), the bulbous root of *Colocasia Indica*, the solid stem of plantain plants, and plantain flowers, are prescribable. Such pot-herbs as are bitter, and the juice of those varieties of *Citrus acida* which are known by the names of 'Pāti' and 'Kagji,' may be taken. The evening meals should consist of 'pooris' or 'chapatis,' wheat-flour fried in ghee and then boiled in milk and water with sugar, milk, and such confictionery as is not very sweet. For tiffin, the patient may take butter, sugarcandy, the pulp of the seeds of uripe palmyra fruits, melons, the heads of palmyra and wild date trees, and all sweet and ripe fruits. If he can bear it, he may take every morning fresh and unboiled cow's milk mixed with water. The sherbet of sugarcandy proves beneficial. The patient may bathe, according to his bearing capacity, in current water or large tanks and lakes. All kinds of dry food, or food that is heavy and difficult of digestion, or sour, curds, treacle, fish in copious measure, *Phaseolus radiatus*, chillies, and potherbs should be abstained from. Sexual indulgence, riding on horses or other animals, physical exercises, suppressing the urgings of stools and urine, strong wines, night-keeping and anxieties, should also be avoided.

Diet and forbidden practices.

CALCULUS OR STONE.

The excited wind dries up the urine and the semen, or both the bile and the phlegm. The result is the formation of hard substances, called calculi, in the kidneys.

Name and incubatory symptoms.

In common parlance, this is called 'Páthari' (lit., stone). Before the appearance of the disease, swelling manifests itself in the pelvic region, accompanied by great pains in the pubic and the contiguous regions. In the urine the smell of the goat may be noticed. Micturition becomes difficult. Fever and disgust for food also show themselves. Calculi are supposed to be generated by the wind the bile, the phlegm, and the semen, each rendered morbid by distinctive causes that are known to excite it. This disease is, therefore, regarded as of four varieties, *viz.*, 1. wind-born, 2. bile-born, 3. phlegm-born, and 4. semen-born. The common symptom of all varieties of calculi is pain in the region of the navel, in the region below that of the navel, in the region below the testicles, and in the rectum. When the urinary passage is obstructed by calculi, the flow of the urine becomes obstructed. Straining during urination, produces pain. If the urinary passage be not obstructed by the presence of any calculus or calculi, the urine becomes slightly red. If the presence of calculi causes sores in the urinary passage, the urine then that is discharged is seen to become bloody.

In the wind-born variety of this disease the calculi assume a dark or red colour. They are, again, overspread with fine thorny bristles. The patient grinds his teeth and shivers from head to foot. He utters loud cries in agony,

Wind-born and bile-born calculi.

and always wishes to press the region about the navel. He wishes also to repeatedly put pressure upon the pennis. By even hard straining he cannot pass urine beyond a few drops, although that straining may succeed in expelling the downward wind or stools. Bile-born calculi are hot to the touch, red, yellow, or dark in colour, and resemble the seeds of *Semecarpus Anacardium* in shape and size. Phlegm-born calculi are cold to the touch, large in size, heavy, smooth, and of a tawny colour like honey, or white of colour. These produce severe pain in the pubic region as if it is being pierced with a thousand needles. By checking the emission of the semen, semen-born calculi are generated. These also produce severe pain in the public region, bring about strangury, and inflammatory swelling of the scrotum.

When the calculi, in consequence of repeated pressure or of other causes, become broken into very small pieces, they come to be called by the name of 'Carkará.' When they become pounded into grains like those of sand, the name by which they are known is 'Sikatá.' If the wind retains its normal course, then both these varieties of calculi are expelled with the urine that is passed. If, however, the wind be vitiated, then these, without being expelled, are retained to the great discomfort of the patient, for they bring about weakness, langour, leanness, 'çula' (severe pain) in the abdomen, disgust for food, paleness of complexion, thirst, pain in the chest, and other supervening afflictions.

If in calculus, 'çarkará' and 'sikatá,' inflammation appear in the navel and the scrotum, stoppage of urine take place, and severe pains are felt like to what is felt in 'çulá,' then death is seen to take place.

Treatment should be commenced as soon as the disease manifests itself. If calculi be allowed to remain for some time without treatment, it becomes very difficult to cure them by the action of medicines. Surgical operation becomes necessary. As soon as the incubatory signs appear, oils should be administered. In wind-born calculi, the patient should drink the decoction of the bark of *Capparis trifoliata* (*Crateva religiosa*), dry ginger, and *Tribulus lanuginosus*, into which has been cast the ashes of green barley spikes, 2 mashas, and old treacle, of the same measure. The decoction of *Tribulus lanuginosus*, the leaves of *Ricinus communis*, dry ginger, and the bark of *Capparis trifoliata*, alleviates all varieties of calculi. In 'çarkará,' the patient should take the decoction of the bark of *Capparis trifoliata*, *Colcus Amboinicus*, dry ginger, and *Tribulus lanuginosus*, casting into it six annas weight of the ashes of the green spikes of barley. The pulv of the seeds of *Tribulus lanuginosus*, of the measure of 4 annas, mixed with sheep's milk, taken every day for a week, cures all varieties of calculi. Great benefit may be derived from the following drinks : 1. the tuberous roots of *Hypoxis orchoides*, reduced to paste and dissolved in water raised a day before ; 2. *Sida alba*, reduced to paste and dissolved in similar water ; 3. the flowers of the cocoanut, 4 mashas, and the ashes of green barley spikes, 4 mashas, dissolved in water. Some of the medicines laid down as beneficial in strangury and retention of urine, may, with discretion, be prescribed in calculi. The decoction of the drugs known as 'Cunthyádi', the kashāyas known as 'Varunádi' and 'Vrihat-varunádi', the páchana called 'Eládi,' 'Páshānavajra-rasa,' 'Páshānabhinna,' 'Trivikramarasa,' 'Varunādyā-ghrita,' 'Kulatthādyā-ghrita,' and

'Varunádya-taila,' are some of the best medicines prescribable for calculi, 'çarkará,' and 'sikatá.'

All those kinds of food which are proper in strangury and retention of urine are prescribable in calculi and 'çarkará' and 'sikatá,' and forbidden practices. Those kinds of food and drink, and those practices, which should be abstained from in strangury, &c., should be avoided also in calculi and the two other forms of this disease.

PRAMEHA.

Cessation of labour, sitting or lying on a bed day and night, indulgence in excessive sleep, eating to excess the flesh of aquatic animals as also of those which live in marshy lands, drinking curds and milk in large measures, taking new rice, drinking new water (that is, that which falls in the rainy season), treacle, and all other food and practices which generate and excite the phlegm, vitiate the phlegm in the lower intestines. As its consequence, the fat, the flesh and the impurities of the body become vitiated, and 'Prameha' born of phlegm is generated. Similarly when the bile becomes vitiated, bile-born 'Prameha' manifests itself. When the phlegm and the bile are dried up, the wind becomes excited. The excited wind drives the fat, the marrow, the *ojas*, and the 'lasiká' towards the lower intestines, and generates 'Prameha'. 'Prameha' is of twenty types. That born of phlegm admits of ten divisions: they are 1. 'Udakameha', 2. 'Ikshumeha', 3. 'Sándrameha', 4. 'Surámeha', 5. 'Pishtameha', 6. 'Cukrameha', 7. 'Sikatámeha', 8. 'Citameha' 9. 'Canairmeha' and 10. 'Lálámeha'. 'Prameha

born of bile is of six kinds : 1. 'Kshárameha,' 2. 'Nílameha,' 3. 'Kálameha,' 4. 'Háridrameha,' 5. 'Mánjisthameha,' and 6. Raktameha. The disease born of wind is of four sorts : 1. 'Vasámeha,' 2. 'Majjámeha,' 3. Kshaudrameha, and 4. 'Hastimeha.'

Immediately before 'Prameha' of any variety appears, the premonitory symptoms are growth of filth in excess in the teeth, the eyes, the ears, and other outlets of the body, a burning sensation in the hands and the feet, an oily appearance of the whole body, thirst, and a sweet taste in the mouth. Besides, the two other premonitory symptoms, common to all sorts of 'Prameha,' are excessive urination, and turbidity of the urine.

In 'Udakameha' the urine becomes sometimes turbid, and sometimes limpid. But it is always slimy, white in colour and void of smell like water. In 'Ikshhumeha' the urine becomes solidified if it is kept for a time. In 'Vasámeha' the urine looks like wine. When caught in a vessel the lower portion looks transparent, the upper dense and turbid. In 'Pishtameha' the patient undergoes horripilation while he urinates. The urine becomes copious and looks white like water in which powdered rice has been dissolved. In 'Cukrameha' the urine resembles semen or is found mixed with semen. In 'Sikatámeha' hard substances like particles of sand come out with the urine. In 'Citameha,' the urine becomes very cold, copious, and sweet in taste. In 'Canairmeha' the urine comes out with little force and in little quantity at a time. In 'Lálameha' the urine is slimy, thready, and as if mixed with saliva. In 'Kshárameha' the urine has the odour, colour, taste and touch of water in which alkaline ashes have been dissolved. In 'Níla-

Symptoms of the different types of the disease.

meha' the urine becomes blue. In 'Kálameha' it becomes dark in colour. In 'Háridrameha' the urine becomes yellow in colour, and pungent in taste. There is, moreover, a burning sensation in the urethra during urination. In 'Mánjisthameha' the urine becomes red like water reddened with (*Manjisthá*) *Rubia Cordifolia*, and is fishy in smell. In 'Raktameha' the urine is fishy in smell, hot, and saline in taste. In 'Vasámeha' the patient passes urine which resembles fat, or which is found mixed with fat. Some call 'Vasámeha' as 'Sarpimeha.' In 'Majjámeha' the urine resembles the marrow or is mixed with marrow. In 'Kshaudrameha' the urine is partly astringent and partly sweet in taste and is rough in touch. In 'Hastimeha' the patient passes urine copiously like an elephant in rut. No urging for urination is felt. Sometimes retention of urine takes place in this disease.

In the ten varieties of 'Prameha' born of phlegm the supervening symptoms are indigestion, disgust for food excessive sleep, spitting of phlegm with cough, and inflammation of the schneiderian membrane with loss of the sense of smell. In the six sorts of 'Prameha' born of bile the symptoms that supervene are a sensation of the kidneys and the urethra being pricked with needles, a sensation of the genital organ being severely twisted, bursting of the scrotum, fever, a burning sensation of the whole body, thirst, acid eructations, swoons, and severe purging. In the four kinds of 'Prameha' born of wind, the disease known as 'Udávartta', shivering, pain in the chest, desire for all sorts of food, 'Culá', loss of sleep, waste or consumption, phthisis, and asthma supervene.

All sorts of 'Prameha' with supervening symptoms are extremely difficult of cure. If any type of this disease be allowed

to remain for a long time without treatment, it takes the form of 'Madhumeha,' In 'Madhumeha' the urine becomes dense as honey, slimy, and sweet in taste. Even the body of the patient becomes sweet. The particular symptoms also of 'Prameha' born of the fault that is predominant in this stage appear as well. If 'Prameha' is neglected for a long time, eruptions are seen on the body of the patient. 'Madhumeha,' as also every variety of 'Meha' with eruptions, is incurable. If the son inherits 'Meha' from the father or the mother afflicted by it, the disease also becomes incurable. If in 'Meha' eruptions appear in the rectum, the head, the chest, the back, or any vital part of the body, and thirst or phthisis supervenes, the eruptions cannot be cured.

'Prameha' is naturally difficult of cure. It should be treated as soon as it appears. The expressed juice of *Tinospora cordifolia*, that of *Phyllanthus Emblica*, also that of the roots of *Bombax Malabaricum* (when the tree is young), are good remedies. The decoction of the three myrobalans, viz., the chebulic, the emblic, and the belleric, of *Cedrus Deodara*, or of *Cyperus rotundus*, administered with honey, alleviates all sorts of 'Prameha'. The expressed juice of *Phyllanthus Emblica*, mixed with honey and powdered turmeric, is equally beneficial. In 'çukra-meha' the expressed juice of *Asparagus racemosus*, taken with milk, produces beneficial results. Raw milk, one-eighth seer, mixed with the same measure of water, is highly efficacious in this variety of 'Prameha', if taken every morning. Take the flowers of *Butea frondosa*, one tola in weight, and sugar, half of that measure. Administer it with cold water. This proves efficacious in all varieties of 'Prameha'. 'Bangabhashma' is an excellent medicine of this disease. 'Bangabhashma', 2 ratis, administered with honey, powdered

turmeric, and the expressed juice of the roots of *Bombax Malabaricum*, is beneficial in 'Prameha' of all types.

It urine be suppressed in 'Prameha', the patient should
 •
 Suppression of urine in 'Prameha' drink hot water dissolving in it the
 pulv, measuring 4 annas, of the seeds of
Cucumis utilissimus, 'Saindhava', salt
 and the three myrobalans. The medicine known as
 'Kuṣāvaleha' and the drugs used in Strangury should be
 prescribed in this stage. The expressed juice of the leaves
 of *Colus Amboinicus* is a good curative in retention of
 urine. The scriptural preparations known as 'Eládichurna'
 'Mehakulántaka-rasa,' 'Mehamudgara-batiká,' 'Bangeswara,'
 'Vrihadbangeswara,' 'Vrihathariṇankara-rasa,' 'Somanátha-
 rasa,' 'Indra-batiká,' 'Sarnabanga,' 'Basantakusumákara-rasa,'
 and 'Chandanásava,' should be administered with discretion.
 The ghee known as 'Dádimbádya' and the oil called 'Prameha-
 mihira' should as well be used, considering the condition
 of the ailment. Our 'Pramehabindu' is an excellent specific
 for all sorts of 'Prameha'.

If eruptions appear in 'Prameha,' the exudation of *Ficus*
 •
 Curatives of eruptions. *glomerata*, or the seeds of *Vernonia*
athelmintica grinded into a paste,
 should be applied as a plaster. The decoction of *Hemedesmus*
Indicus, *Echites frutescens*, *Vitis vinifera*, *Convolvulus Tur-*
pethum, 'Sonámukhi,' chebulic myrobalans, the bark of
Adhatoda Vasica, the bark of *Melia Azadirachta*, turmeric,
Berberis Asiatica, and the seeds of *Tribulus terrestris*, checks
 the eruptions. The scriptural medicines called 'Cáribádi-
 lauha,' 'Cáribádiásava' and 'Makaradhwaja-rasa,' are highly
 beneficial in this stage of 'Prameha'. Other medicines of 'Fra-
 meha' may also be applied with discretion. Our 'Amritaballi
 kasháya' is an exceedingly efficacious curative of eruptions.

' In daytime the patient should be given old rice and such pulses as *Cicer lens*, *Phaseolus Mungo*, *Cicer arietinum*, a little of such soup as is made of small fishes ; such meat-juice as is made of the flesh of the hare, the dove, the goat, the hen, or deer. Such curries as are made of *Trichosanthes dioica*, *Ficus glomerata*, brinjals, *Colocasia antiquorum*, cods of *Moringa-pterigospema*, stem of the plantain plant, plantain flowers, and plantains of the variety called 'Thote,' and lemons of the variety known as 'Pāti' and 'Kágji,' are beneficial in this disease. At night 'chapatis' or 'puris' and such curries as are mentioned above, a little quantity of milk, and a little measure of sweets should be taken. All bitter and astringent articles are beneficial. For tiffin, pieces of sugarcane, the fruits of *Tropa bispinosa*, dried fruits of *Vitis vinifera*, almonds, pomegranates, *Cicer arietinum* soaked in water, and wheat flour fried in ghee and boiled with milk and sugar, may be taken. The patient should bathe agreeably to what he can bear.

Copious measure of milk, or of sweets and fish, chilles, potherbs, acid articles, *Phaseolus Roxburghii*, curds, treacle, gourds, the

Forbidden food.

soft pulp of the seeds of the palmyra fruit, and other articles which excite phlegm should not be taken. Drinking, sexual indulgence, sleep at daytime, night-keeping, exposure to the sun, suppression of the urging of urine, smoking in excess, and such other practices are injurious in 'Prameha'.

In 'Cukrameha' nourishing food is highly useful. The digestive power of the patient should be looked after. The diet prescribed in Impotency should be resorted to in this disease also. In 'Madhumeha' the diet prescribed

Diet in 'Cukrameha' and 'Madhumeha'

for diabetes characterised by copious discharge of urine, is advisable.

In consequence of sexual congress with public women attacked with gonorrhœa, a man gets
Gonorrhœa. this disease. It is a form of 'Prameha.'

[Its Sanskrit name is 'Aupasargika-meha'. It manifests itself within a week from the time of sexual contact. The symptom that appears at first is a tickling sensation at the top of the genital organ. Involuntary erections take place. At such times, as also during and after urination, the patient feels a burning pain. Erection and desire to pass urine are frequent. Gradually ulceration of the urethra sets in. The organ swells and becomes red in colour. Pain is felt in the testicles and the groins. Foul juicy matter, and pus, and blood are seen to issue from the urethra. The urethra being filled with pus, urine comes out with difficulty, in a little measure, and sometimes in two jets. As this disease becomes old, pain, which is its chief symptoms, abates. It is highly contagious. One man gets it from a woman attacked by it and communicates to another woman who, in her turn, communicates it to another man.]

In gonorrhœa the first thing a physician should do is to have the urine cleansed. Medicine should also be applied to cure the ulceration in the urethra. The following is a good medicine : take the decoction of the three myrobalans, the bark of *Acacia Arabica*, and the bark of *Ficus religiosa*. Add water in which has been dissolved the exudation of *Acacia catechu*. Add to this a little 'Dadhimantha' Injection of the preparation into the urethra cures ulceration. Take 'Kábábchini', two annas, saltpetre, one anna, 'Sonámukhi' one anna. Pound them together.

Dissolve the preparation in hot water. The patient should drink it, cooled, every morning. At night, while going to bed, the patient should take a dose made of 'Kábábchtni', one anna, camphor, 2 ratis, and opium, half a rati, pounded together. This makes the urine flow freely. Erections and night pollutions are also checked. Ulceration also is healed. The medicine, called 'Bangeswara', if taken with water in which gum Arabic is soaked, cures the discharge of pus and other foul matter. 'Meha-mudgara-vatiká' may be used for 'Bangeswara', and the expressed juice of the leaves of *Acacia Arabica* for the gum-water. The drug mentioned above, if used with the expressed juice of *Tinospora cordifolia*, or with the water in which the sticks of the leaves of *Cinamomum Tamala* are soaked, cures the burning of the urethra. When there is swelling in the pennis, it should be dipped in the lukewarm decoction of the three myrobalans, or in the infusion of the leaves of the nutmeg tree. It cures the burning sensation. The pennis should always be kept head upwards and wrapped with a piece of cloth. For causing the urine to flow freely, the aforesaid medicines with the juice of the leaves of *Colcus Amboinicus*, as well as 'Kuçavaleha', should be administered. Our 'Pramehabindu' is a specific for this kind of 'meha.' It is sure to cure the disease quickly. If this disease is not cured perfectly, it develops into 'Cukrameha', thinness of the semen, and gradually into impotency. Bathing or any sort of cooling operation is strictly forbidden. Though cooling operations seem to alleviate the disease at first, in the end they generate pain in the joints and may even make the patient incapable of moving his limbs.

DIABETES.

This disease is known under the name of 'Vahumutra.'

Name, causes, and symptoms.

It is otherwise called 'Shoma-roga.'

Both these terms will be explained below. Eating in a large measure

things that are sweet or that generate phlegm, excessive sexual indulgence, grief, excessive labour, sexual contact with a woman that is diseased, excessive drinking, excessive sleep at daytime, excessive anxiety, and the introduction of poison into the system, are some of the causes that vitiate the watery ingredients of the body, and drive them into the urinary ducts. The watery ingredients, thus vitiated and forced from their places, become transformed into urine and escape repeatedly and copiously. The emission is accompanied by no pain. The substance emitted is clear, cool, white, and inodorous. The symptoms that manifest themselves are excessive weakness, incapacity for locomotion and sexual indulgence, inability to hold the head erect, dryness of the mouth and the palate, and insatiable thirst. This disease is called 'Shoma-roga' because of the waste that it causes of the watery ingredients of the body which are called 'Shoma.*' When the disease is in its intensity, the symptoms are emaciation, copious perspiration, a foetid smell in the body, cough or consumption, laxity of the flesh, disgust for food, pimples and other eruptions on the body, paleness of the complexion, sense of fatigue, yellowness of

* 'Shoma' means the moon, or water. All water is supposed to proceed from the moon. Hence the watery ingredients of the body are supposed to appertain to the moon. The disease, therefore, which is characterised by a copious discharge of the watery ingredients of the body, is called after the moon.

the urine and sweetness of taste, and heat in the palms, the soles, the tongue, and the ears.

If in this disease, when there is great loss of strength, such symptoms as delirium, swoons, carbuncular abscess in the back, and others difficult of cure appear, the likelihood of death becomes imminent.

This disease may be checked by the patient taking the following medicine : one ripe plantain, the juice, measuring 1 tola, of the fruit of *Phyllanthus Emblica*, honey, 4 máshás, sugar of the same measure, and milk, one-fourth of a seer. The copiousness of the discharge may be checked by ripe plantains, the fruit of *Convolvulus paniculatus*, and *Asparagus racemosus*, in equal measures, mixed with milk. Another preparation which proves efficacious consists of the juice or the pulv, of the fruit of *Ficus glomerata* (of the larger variety), the pulv of the seeds of *Eugenia Jambolana*, the juice of the bulbous root-stock of plantain plants, the juice of the fruit of *Phyllanthus Emblica*, the juice of new-born palmyra fruit as also of the roots of the date tree, the juice of the roots of *Momordica monodelpha*, water in which new-born or raw guavas have been soaked, and the juice of the burnt fruit of *Cucumis acutangulus*. The scriptural medicines are 'Vrihadbangeswara-rasa', 'Tárakeswara-rasa', 'Shomanátharasa', 'Hemanátha-rasa', 'Vasantakusumákara-rasa', 'Vrihatdhátri-ghrita,' and 'Kadalyádyá-ghrita.'

During daytime, old rice of the finer varieties, the soup of such pulses as *Phaseolus Mungo*, *Cicer lens*, and *Cicer arietinum*, the meat-juice of goats, deer, and fowl, curries made of such vegetables as *Trichosanthes dioica*,

Diet and forbidden practices.

Ficus glomerata (of both varieties), the stem of plantain plants, *Cucumis acutangulus*, plantain flowers, the variety of plantains called 'Káñchkalá,' the leaves of *Moringa pterygosperma*, the cods of the same, &c., should be taken. The evening meals should consist of 'chapatis' made of the flour, called 'Atá,' of wheat or barley, curries made of the vegetables named above, and skimmed milk. The fruit of *Phyllanthus Emblica*, and of *Eugenia Jambolana*, the bulbous roots of *Scirpus Kysoor*, ripe plantains, the juice of *Citrus acida*, and old wines prove beneficial. All kinds of drying operations, riding on horses or elephants, walking, and physical exercises, produce very beneficial results. When the disease is in its intensity, the patient should, during daytime, take 'chapatis' of wheat flour or barley instead of rice. He may, giving up 'chapatis' also, confine himself to only the kind of milk indicated above. Boiled water, cooled, should be drunk. The patient should bathe in similar water. All kinds of heavy food, food also that generates phlegm, flesh of animals living in marshy regions, curds, milk in copious measure, sweets, *Cucurbita Pepo*, *Cucurbita lagaria*, potherbs, sour articles, the soup of *Phaseolus radiatus*, chillies and other pungent things, water in copious measure, strong wines, sleep at daytime, night-keeping, excessive sleep, sexual indulgence, and idleness and inactivity, should be avoided. These are very baneful in this disease.

IMPOTENCE AND THINNESS OF THE VITAL SEED.

Sexual indulgence at an age when one has not arrived at maturity, loss of vital seed by onanism or other means of a similar kind, and excessive indulgence in sexual pleasure, and other causes of a similar nature produce thinness of the vital seed. The usual characteristic of the disease is the emission of the vital seed at the very thought of sexual congress or at the time the patient passes urine or stools. The patient during sleep suffers loss of semen. Discharge at the very commencement of the sexual act, loss of appetite, constipation or looseness of the bowels, indigestion, vertigo, blackness round the eyes, weakness, loss of energy, and love of solitude, are some of the other symptoms. When the disease is in its intensity, discharge of semen takes place even when there is no erection. The power of erection becomes lost. Hence this disease gradually develops into impotence. Impotence, or loss of virility, may arise from other causes as well. Fear, grief, or mental perturbation from any other cause, sexual congress with a woman that is an object of abomination, the vitiation of the semen-bearing ducts through bubonic and other diseases, abstention from sexual congress when desire has been excited, and eating in excessive measure articles that are pungent, or sour, or saline, and similar other causes, lead to impotency.

The principal treatment of thinness of the semen is

Treatment of thinness of
the semen.

preservation of the semen from loss.

The juice of the budding flowers of
Bombax Malabaricum, the pulv of

Hypoxis orchoides, the juice as also the pulv of *Convolvulus
paniculatus*, the juice of the fruit of *Phyllanthus Emblica*
the seeds of *Mucuna pruriens*, the seeds of *Ruellia longifolia*,
and liquorice, increase the semen and cure its thinness.

For preventing emission of the semen when stools and

Treatment of impotence.

urine are passed, as also for relieving

impotence, the following medicines

should be administered, using the drugs named above as
vehicles: 'Vrihat-bangeswara', 'Somanátha-rasa', 'Cukramátriká-
vati', 'Kámachudámani-rasa', 'Chandrodaya-makaradhwaja',
'Purnachandra-rasa', 'Mahálakshmivilása', 'Ashtávakra-rasa',
'Manmathábhra-rasa', and 'Makaradhwaja-rasa'. The follow-
ing ghees and oils and boluses also are very efficacious in
both these diseases, *viz*, thinness of the semen and impotence.
'Amritapráça-ghrita', 'Vrihat-Aswagandhá-ghrita', 'Kámadeva-
ghrita', 'Vánarivatiká', 'Kámágnisandipana-modaka', 'Madana-
modaka', 'Catávari-modaka', 'Ratiballabha-modaka', 'Sree-
gopála-taila', and 'Pallavasára-taila'. Our own 'Rativilása'
relieves both these diseases very promptly. For preventing
wet dreams, the following preparation proves beneficial; it
should be taken at bed-time: the pulv of 'Kábábchini,' of the
weight of 1 anna, camphor, 2 ratis, and opium, half a rati,
compounded together and mixed with honey, or only the pulv
of 'Kábábchini,' of the weight of 2 annas, mixed with honey.
Our own 'çivadá' pills also are very efficacious for preventing
such dreams. For preventing the quick discharge of semen,
the boluses spoken of above, as also 'Nágavallyádi-

churna,' 'Arakádi-vatiká,' 'Cukraballabha-rasa,' and 'Kámini-vidrávana-rasa,' are regarded as lightly efficacious.

All kinds of nourishing food are the proper regimen in both these diseases. At daytime old rice of the finer varieties, 'Rohita' fish, the meat-juice of goats, sheep, sparrows, hens, pigeons, quails (*Perdix chinensis*), francoline partridges, such pulses as *Phaseolus Mungo*, *Cicer lens*, and *Cicer arietinum*, eggs of geese, the testicles of goats, potatoes, *Trichosanthes dioica*, *Ficus glomerata* (of the smaller variety), the bulbous root-stock of *Colocasia Indica*, cabbages, turnips, carrots, and similar vegetables cooked with ghee (instead of oil), should be taken. The evening meals should consist of 'puris' or 'chapatis' of wheat flour, curries made of the vegetables named above, milk, and sweets not exceeding the measure that is proper. For tiffin the patient may take such articles as are made of ghee, sugar, and the flour of wheat or of gram. Such fruits as Cabul pomegranates, almonds, *Pistacia vera*, *Uva passa*, grapes, dates, mango, jack, and *Carica papaya*, &c., are beneficial. The patient should take all kinds of nutritive diet, without impairing his digestive power. Baths may be taken agreeably to what he can bear. Excessive salt, chillies and other pungent things, sour things in excessive measure, exposure to the heat of the sun or of fire, night-keeping, excessive drinking, sexual indulgence, and labour that produces fatigue, should be avoided.

OBESITY.

If one always takes such food as generates phlegm, or abstains from physical exercises and every sort of physical labour, or sleeps at daytime, then the food taken, before being digested properly, becomes transmuted into a raw juice that is sweet in taste. From the oily part of that raw juice results an increase of adeps terminating in the disease called Obesity. In this disease, in consequence of the extraordinary increase of adeps the juice-bearing and blood-bearing ducts become obstructed. The result is that the other ingredients of the body derive no nourishment; only the adeps increases beyond measure and leads to such obesity of the frame as to make the owner entirely incapable of every kind of exertion or locomotion. Short breaths, thirst, swoons, excessive sleep, sudden obstructions in breathing, stupefaction of the body, excessive hunger, copious perspiration, a foetid smell of the body, and loss of strength as also of the capacity for sexual indulgence are some of the symptoms that accompany this disease.

When the adeps increases excessively, all the three faults become excited and suddenly bring about such diseases as pimples and eruptions of the kind that appear in 'Prameha,' as also fever, fistula-in-ano, and other terrible ailments. When these diseases appear, the person suffering from obesity very frequently meets with death.

The principal treatment of this disease consists of the adoption of such measures as dry the system and make the body lean. By drinking every morning honey mixed with water, relief

may be had in this disease. The pulv of the three myrobalans, or of the three bitters, mixed with mustard oil and salt, if taken continuously for a long time, cures obesity. Another medicine consists of the following taken in equal proportions, *viz.*, *Embelia Ribes*, dry ginger, the ashes of green barley spikes, the ashes of pure iron, barley, and the fruit of *Phyllanthus Emblica*. The compound should be taken with honey. The juice of *Premna serratifolia*, as also 'Silá-Jatu', * is specially beneficial in this disease. The scriptural medicines, are 'Amritádi-guggulu,' 'Navaka-guggulu,' 'Tryshanádyá-lauha,' 'Vadavágni-lauha,' 'Vadavágnirasa,' and 'Triphaládhyá-taila.' For removing the foetid smell of the body, 'Mahásugandhi-taila,' or our own 'Himáng-sudrava' is highly efficacious.

At daytime the meat should consist of rice obtained from the paddy called 'çyámá' (*Panicum frumentaceum*), or if this is not obtainable, old rice of the finer varieties, the soup of fishes classed as small, and such vegetables as *Ficus glomerata* (of the smaller variety,) the plantains known as 'Káñchkalá,' plantain flowers, the fruit of *Trichosanthes dioica*, and old fruit of *Cucurbita Pepo*, and the juice of *Citrus acida* of the varieties known as 'Páti,' and 'Kágji.' For evening meals the patient may take 'chapatis' of the flour, called 'Átá,' of barley, and curries made of the same vegetables. Among sweets the patient may take a little sugarcandy. He should not bathe. If, however, he cannot remain without bathing, he may use boiled water rendered cool for the purpose. He should also drink boiled water.

* The term is applied to certain bituminous substances said to exude from rocks during the hot weather. It is said to be produced in the Vindhya and other mountains where iron abounds.

Physical exercises and labour, mental activity, walking, night-keeping and sexual indulgence are specially beneficial in obesity. The patient should abstain from all food that is oily or that generates phlegm, as also milk, curds, ghee, butter, meat, fish, food cooked in ghee, soft or luxuriant beds. He should sleep, as much as possible, and sleep at day time. He should not sit in the same place for a long time, nor keep himself idle. The absence of mental exercise is specially baneful in this disease.

EXCESSIVE LEANNESS.

By eating food that is dry, undergoing excessive toil, indulging in excessive mental activity, or nursing anxieties, and by indulging also in sexual congress in an inordinate measure, one gets the disease called Excessive Leanness or Emaciation. When this ailment sets in, the adeps, flesh, and all the other ingredients becomes attenuated. The result is that the patient gradually becomes weaker and weaker. *Physalis flexuosa* forms one of the best medicines for this disease. It should be taken, cooked with milk, *ghee*, or water, every day. Among the medicines spoken of in the chapter on Thinness of the Semen, 'Açwagandhá-ghrita,' and Amritaprāça-ghrita' are very beneficial in leanness. Besides, 'Cchágáládyā-ghrita' and other nourishing medicaments spoken of in the chapter on Nervous diseases, prove efficacious in curing Emaciation. Our own 'Acwagandhārishṭa' is a highly beneficial medicament for this disease. By rubbing the wasted body with the following preparation very good results may be expected : the 'Kalka' of *Physalis*

Causes &c., and treatment.

flexuosa, of the measure of one seer ; the decoction of the same, six seers ; and milk, six seers ; these should be cooked with the oil of sesame seeds, of the measure of four seers.

The patient should take ghee, milk, meat, fish, and all kinds of nourishing food. He should
Diet. try to have good slumber. He should indulge in sleep at day time. He should give up all kinds of labour. Freeing himself from all kinds of anxieties and mental activity, he should try to pass his time cheerfully. Nourishing meat forms the best diet in this disease. The directions about regimen and forbidden practices laid down in the chapter on Impotence and Thinness of the Semen apply to this ailment also.

ABDOMINAL DROPSY.

Of all varieties of abdominal dropsy the one cause is certainly weakness of the digestive fire. Besides this, some other circumstances operate to bring about this disease. These are the eating of such food as produces indigestion and accumulation of water in the stomach. All these causes provoke the faults which obstruct the sweat-bearing and water-bearing ducts of the body, and vitiate the upward and the downward breaths (Prána and Apána), and the digestive fire. The result is abdominal dropsy. There is another way in which this disease may arise. When the spleen or the liver becomes excessively enlarged, or when the intestines suffer any injury, and water accumulates within them, abdominal dropsy presents itself.

Flatulence of the stomach, incapacity for locomotion, weakness, total loss of appetite, swellings, langour of the whole body, suppression of stools and the downward wind, burning of the skin, and drowsiness are the general symptoms of the disease.

Abdominal dropsy is of eight varieties. They are

1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the three faults, 5. spleen-born, 6. liver-born, 7. that born of accumulated stools &c., 8. that born of accumulated water, and 9. that born of intestinal wounds.

In the wind-born variety swellings appear at the hands, the feet, the navel, and the abdomen, as also pairs in the abdomen, the sides, the stomach, the waist, the back, and the joints. The other symptoms are a dry cough ; a relaxation of the body ; a sense of heaviness in the lower part of the body ; suppression of stools and urine ; darkness or redness of the skin, the eyes, and the urine ; sudden diminution or increase of the abdominal swelling ; piercing or breaking pains in the stomach ; the appearance of fine dark veins above the stomach ; a hollow sound when the stomach is struck, like that emitted by a bag of air struck with the hand ; and the constant movement of the wind within the stomach, accompanied by pain.

In the bile-born variety the symptoms that manifest themselves are fever, swoons, a pungent taste in the mouth, vertigo, diarrhœa, yellowness of the skin and the eyes, copious perspiration on the stomach, a burning sensation of the body, accompanied by heat and pain and extreme softness of the body. The greater part of the body becomes covered with veins of a green or yellow or coppery colour. The patient feels as if hot vapours are arising from the surface of the stomach.

The bile-born variety of abdominal dropsy very soon develops into dropsy characterised only by accumulation of water.

After-consequence.

In the phlegm-born variety the symptoms that manifest themselves are a stupefaction of the body, loss of the sense of touch, swellings, heaviness of the limbs, sleep, nausea, disgust for food, asthmatic breath, cough, and paleness

Symptoms of the phlegm-born variety.

of the skin. The abdomen becomes enlarged, stupefied, bright, hard, cool, heavy, unmoving, and covered with 'white veins'. The progress of this variety of dropsy is very slow, for the disease does not gain in intensity till after a long time.

If one eats food which is vitiated by the presence in it
 Symptoms of the variety of nails, or hair, or urine, or stools,
 born of the three faults. or any kind of poison, or which is
 inconsistent with the requirements of

the season, one's faults become all excited with the result that dropsy born of all the three faults succeeds. The symptoms presented are those, in a combined form, of the three separate varieties mentioned above. The patient becomes pale and emaciated; and his throat becomes parched with thirst. He swoons repeatedly. This dropsy increases and becomes painful in the cold season or when the patient comes in contact with cold winds, or on days of rain and storm. This variety of dropsy is also known as 'Dushyodara' or dropsy due to vitiated ingredients of the body.

By eating continually food that generates or provokes
 The causes and symptoms of spleen-born and liver-born-varieties. the phlegm, or that becomes sour in
 course of digestion, the phlegm and
 the blood become vitiated and cause
 enlargement of the spleen or the liver,
 or of both. When the spleen or the liver, becoming excessively enlarged, enlarges the stomach with it, and when such symptoms manifest themselves as langour of the body, mild fever, loss of appetite, loss of strength, paleness of complexion, and other supervening indications of excited phlegm and bile, the disease is called 'spleen-born or liver-born dropsy'. In spleen-born dropsy it is the left side of the abdomen that is enlarged more than the right. In the liver-born variety the right side becomes more enlarged

than the left. If the wind predominates in any of these diseases, then 'Udāvarita' and 'Anāha', accompanied by pain, succeed. If the bile predominates, the supervening symptoms are loss of consciousness, thirst, burning, and fever. If the phlegm predominates, heaviness of the limbs, disgust for food, and hardness of the stomach appear.

If hair or gravels be present in the food and potherbs, &c., that one takes, such hair and gravels, entering the intestines, inflict wounds upon them, producing sores. The result is that the stools and the faults accumulate within the wounded intestines and produce the variety of dropsy, characterized by accumulation of stools, which is known by the name of 'Vaddhagudodara. In this variety that part of the abdomen which lies between the heart and the navel is seen to swell. The patient passes stools with great difficulty in little quantities.

If thorns and thorny substances be present in the food one takes, they pierce the intestines. Over-feeding, and even yawning, sometimes, are seen to tear the intestines. The watery juices, secreted from the wounds, collect together and enlarge the abdomen below the navel. Watery secretions also issue out of the anal canal. This dropsy that is born of intestinal wounds is called 'Parisrábyudara'. In this disease the patient feels excruciating pains. He feels as if his abdomen is being pierced with a thousand needles or is being torn asunder.

If one suddenly drinks cold water after having taken oils or enemata, either oily or dry, or emetics or purgatives, the water-bearing ducts of the body become

Symptoms of the variety
born of accumulated
stools, &c.

Symptoms of the variety
born of intestinal wounds.

Symptoms of the variety
born of accumulated water.

vitiated. The same result follows if the water-bearing ducts are smeared by the oils taken. The consequence, in both cases, is the emission of water from those ducts. It is needless to say that the water emitted gradually enlarges the stomach. This disease is called 'Jalodara', that is, abdominal dropsy generated by accumulated water. The stomach becomes bright and enlarged. In consequence of its being full of water, it rises and sinks as the patient moves and gives a sound, when struck by the hand. Another symptom is the appearance of pain all round the region of the navel.

Almost all varieties of abdominal dropsy are difficult to cure. Those arising from intestinal Curability or otherwise. wounds and accumulated water are exceedingly so. Cure cannot be expected without a surgical operation. If the disease be old, or if the patient loses his strength, it then becomes incurable, whatever the variety. Those varieties, again, in which the patient's eyes become swollen, the penis becomes curved, the skin thin and filthy, and strength, digestive power, blood, and flesh decrease, or in which the patient's sides seem to him to be broken, and in which the additional symptoms of disgust for food and diarrhoea appear, and in which purgatives do not act properly, prove incurable and soon result in death.

In almost all varieties of this disease all the three faults are found to be excited. Hence Treatment. the treatment should have for its object the alleviation of every one of the faults. Medicines should be administered for increasing the strength of the digestive fire if the patient's power of digestion be impaired. For purging, castor-oil should be administered with either warm milk or cow's urine. In the wind-born variety,

'sweda' should be applied after rubbing the body with medicated ghee and oils. After this the patient should be purged and his stomach properly bandaged with a piece of cloth. Whey forms a good medicine. In the wind-born variety it should be taken with *Piper longum* and 'Saindhava' salt; in the bile-born, it should be drunk with sugar and pepper; in the phlegm-born, it should be drunk with *Ptychotis Ajowan*, 'Saindhava' salt, cummin seeds and the three bitters; and in that variety which is born of all the three faults it should be taken with the three bitters, the ashes of green barley spikes, and 'Saindhava' salt. This medicine relieves heaviness of the limbs and disgust for food. In those varieties of the disease which are due to enlargement of the spleen or the liver, the treatment should be according to what is laid down in the chapter on the enlargement of those organs. In the variety due to accumulated stools, 'sweda' should be first applied and then some strong purgative. Almost all varieties of dropsy may be relieved by *Cedrus deodara*, *Moringa pterygosperma*, and *Achyrrathes aspera*, reduced to paste and dissolved in cow's urine, or by the paste of *Physalis flexuosa*, dissolved in cow's urine. The patient derives much benefit in all varieties of the disease by drinking every morning a 'chatak' of buffalo's urine. Another medicine that is beneficial in all varieties consists of the following, viz., *Boerhavia diffusa*, *Cedrus deodara*, *Tinospora cordifolia*, *Cissampelos hernandifolia*, the roots of *Egle marmelos*, *Tribulus lanuginosus*, *Solanum Indicum*, *Solanum Xanthocarpum*, turmeric, *Berberis Asiatica*, *Piper longum*, the roots of *Plumbago Zeylanica*, and *Justicia Adhatoda*, taken in equal measure, reduced to pulv and dissolved in cow's urine. Abdominal dropsy caused by accumulated water, swellings, elephantiasis, and broncho-

cele, and rheumatism may all be relieved by drinking the decoction of the ten roots, *Cedrus deodara*, dry ginger, *Tinospora Cordifolia*, *Physalis flexuosa*, and chebolic myrobalans. The infusion of *Physalis flexuosa*, the bark of *Melia Azadirachta*, the leaves of *Trichosanthes dioica*, dry ginger, *Picrorrhiza kurroa*, *Tinospora Cordifolia*, *Cedrus deodara*, and chebolic myrobalans, relieves all varieties of abdominal dropsy, swellings on the body, cough, 'çula', asthma, and jaundice. The following scriptural medicines should be applied with discretion, considering the particular fault that is excited : the decoction of the group beginning with *Physalis flexuosa*, the pulv of the group beginning with *Aplotaxis auriculata*, the pulv called 'Sámudrádya', 'Trailokyasundara-rasa', 'Ichcchábhedhi-rasa', 'Nárácha-rasa', 'Pippaládyalauha', 'Chitraka-ghrita', 'Mahábindu-ghrita', and 'Rasonataila'. If the patient be weakened, then, instead of administering any strong purgative, our own 'Saralabhedhi' pills should be administered.

In abdominal dropsy the food to be taken should be light and capable of increasing the strength of the digestive fire. When the disease is in its intensity the 'manda' of '*Colocasia Indica*', or milk, agreeably to what the patient can bear, or milk and sago, and such other light food should be given. When the disease is not in its intensity, old rice of the finer varieties, the soup of *Phaseolus Mungo*, and curries made of such vegetables as *Trichosanthes dioica*, brinjals, *Ficus glomerata* (of the smaller variety,) *Arum Campanulatum*, *Colocasia Indica*, the cods of *Moringa pterygosperma*, *Momordica mixta*, small radishes, *Physalis flexuosa* (of the white variety), ginger, &c., are prescribable. The curries should be cooked with a little 'Saindhava' salt. The

Diet and forbidden practices.

evening meals should consist of milk and sago. If the patient has appetite, thin 'chapatis' of wheat flour may be taken. Boiled water, made cool, should be drunk. All food that is heavy, such as cakes, &c., sesame, salt, the variety of dolichos known as 'simbi,' baths, sleep at daytime, and labour, should be avoided. These are especially baneful in this disease.

ŒDEMA OR INFLAMMATION.

If one eats food which contains alkaline ashes, or which is sour, or of keen virtues, or hot, or heavy, when one has been emaciated and weakened by observance of fasts or the use of food of inharmonious ingredients, or by such diseases as fever, diarrhœa, 'Grahani,' jaundice, piles, hæmorrhage due to excitement of the bile, and enlargement of the spleen or of the liver, or by the administration of emetics and other correctives, one is attacked by the disease called œdema or inflammatory swellings. Other causes, such as the taking of curds, or unripe articles, or earth, or potherbs, or food consisting of such inharmonious ingredients as milk and fish, lead to this disease. If, again, one does not take emetics or purgatives when one requires them, or if emetics or purgatives be not administered in sufficient and proper measure, this disease manifests itself. Women, after abortion or premature delivery, are generally attacked by it. Wounds also, inflicted on vital parts, produce this ailment. The excited wind, forcing the vitiated blood, the bile, and the phlegm into the outer ducts of the body, and itself

becoming obstructed by them, causes the skin and the flesh to swell up. This disease is called *œdema*. Before it is developed, the incubatory symptoms are a sensation of burning, pain accompanied by the sensation of the arteries and nerves being extended or stretched out, and heaviness of the limbs. The general symptoms of the disease are swelling of particular parts, heaviness of the parts swollen, and disappearance or re-appearance of the swelling without apparent cause. Besides, the part swollen is hot to the touch. Distension of the nerves, paleness of the complexion, and horripilation also manifest themselves. The disease is regarded as of seven varieties. These are 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of wind and bile, 5. that born of wind and phlegm, 6. that born of bile and phlegm, and 7. that born of all the three faults.

Wind-born swelling is never stationary in one place. In consequence of its disappearance without apparent cause, it is, at such times, believed to be cured. The upper cuticle of the skin over the swollen part, becomes thin, rough to the touch, red or dark in colour, bereft of sensation, and characterized by tingling pain. This swelling yields or sinks when pressed. As soon as the pressure is removed, it re-appears in the same form. It increases at daytime and decreases during the night.

Swelling born of the excited bile is soft to the touch, has an odor of its own, and is dark or white or red in colour. It has great heat and produces a burning sensation and excessive pain. Suppuration follows. The other symptoms are vertigo, fever, perspiration, thirst, and a sense of inebriation. The eyes assume a red colour.

Symptoms of the wind-born variety.

Symptoms of the bile-born variety.

Phlegm-born swelling becomes heavy, immobile, and of a pale complexion. The symptoms manifested are disgust for food, the discharge of watery secretions from the mouth, sleep, vomiting, and loss of appetite. This swelling sinks when pressed and does not rise up when the pressure is removed. It increases at night time and decreases in the day. Its growth is slow and its cure too is tardy.

When the symptoms of two faults present themselves conjointly, the swelling is regarded as born of those two faults. Similarly when the symptoms of all the faults appear, the swelling is said to be born of all the three faults.

If the fault or faults capable of producing swellings be stationed in the thorax, the swellings appear in the upper part of the body ; if in the 'Pakkāçaya' (that part of the stomach where digestion takes place), swellings appear in the middle part of the body ; if in the receptacles where stools and urine lie, the swellings appear on the soles of the feet ; and if in the whole body, they appear all over the body.

When œdema appears on the middle portions of the body or all over the body, it becomes difficult of cure. In those cases of œdema which appear on the right or the left side, or which appear on the upper or lower half of the body, or which, appearing on the lower part of the body, spreads upwards by degrees, there is great chance of death. If, however, œdema appears, as a supervening symptom of jaundice and other diseases, or on the feet, and spreads upwards, fatal results do not follow. In women the œdema

that appears at first in their face and then gradually descends downwards to the feet, generally proves fatal. Œdema appearing in the rectum, in both sexes, terminates in death. So also œdema appearing in the abdomen, the stomach, the region of the throat and the neck, and in other vital parts, becomes incurable. That œdema which is big and rough, as also that in which the supervening symptoms are asthmatic or short breath, thirst, vomiting, weakness, fever, and disgust for food, does not admit of cure. The disease, when it affects an old man or a woman, a child or one that is exceedingly weak, should be known as incurable.

When œdema appears as a supervening symptom of any particular disease, medicines capable of curing it should be administered along with those that are used for curing the principal disease. The discharge of stools and urine must be kept free. In the wind-born variety, if the bowels be constipated, milk with castor oil should be given. The decoction of the ten roots is specially beneficial. In bile-born œdema the pulv of the roots of *Convolvulus Turpethum*, of the measure of two annas, should be administered with cow's urine. Another remedy is the decoction of the roots of *Convolvulus Turpethum*, *Tinospora cordifolia*, and the three myrobalans. In the phlegm-born variety the decoction of *Physalis flexuosa*, dry ginger, the roots of *Convolvulus Turpethum*, *Tinospora cordifolia*, Chebulic myrobalans, and *Cedrus deodara*, should be given with a little of cow's urine and two annas' weight of *Balsamodendron Mukul* thrown into it. Pepper reduced to pulv, with the juice of the leaves of *Ægle marmelos* or *Melia Azadirachta* or *Physalis flexuosa*, proves specially beneficial in all varieties of

the disease. Œdema is relieved by rubbing it with the juice of the leaves of *Euphorbia nerifolia*. The following scriptural medicines are prescribable with discretion. 'Pathyádikwátha,' 'Punarnaváshtaka' 'Sinhásyádi-páchana,' 'Mánamanda,' 'Cothári-churna,' 'Cothári-mandura,' 'Kansaharitari,' 'Katukádyalaucha,' 'Trikatwádi-laucha,' 'Cothakálánalá-rasa,' 'Panchámrita-rasa,' and 'Dugdhavati.' The scriptural medicines, mentioned in the chapter on the diseases of the Grahani, such as 'Sarnaparppati' may be used in this disease with discretion. In œdema due to jaundice, such scriptural medicines as 'Takramandura' and 'Sudhánidhi,' are highly beneficial. If the patient takes the medicine 'Dugdhavati' or 'Sarnapappati,' he should refrain from taking salt, and should drink milk for water. If there be no fever with œdema, 'Chitrakádyaghrita' should be given to the patient and the swollen parts should be rubbed with such oils as 'Punarnavádi-taila, and 'Mulakádi-taila.'

The diet which is prescribable in abdominal dropsy should be prescribed in this disease also.

Diet. Those kinds of food and practices which are forbidden in dropsy should be abstained from in this disease.

ENLARGEMENT OF THE SCROTUM.

The wind, excited by adequate causes, passes from the groins to the scrotum, and then vitia-
Causes. ting the other faults and ingredients of the body, enlarges the scrotum and causes it to swell. Such swelling is accompanied by pains. This disease is known by the name of 'Koshavridhi' or Enlargement of the Scrotum.

It is of seven varieties, viz., 1. wind-born, 2. bile-born, 3. phlegm-born, 4. blood-born, 5. that
Its varieties. born of the adeps, 6. that born of the urine, and 7. that born of the intestines.

In the wind-born variety the scrotum being enlarged assumes the aspect of a leathern bag
Symptoms of the different varieties. puffed with wind. It is dry and a slight cause brings about pain. In the bile-born variety the scrotum looks red like the ripe fruit of *Ficus glomerata* of the larger variety. It is accompanied by heat and a burning sensation. If allowed to remain unchecked for some time, the inflammation increases and suppurates at last. In the phlegm-born variety of the disease, the scrotum is cold to the touch, heavy, glossy, hard and accompanied by pains and an itching sensation. In the blood-born enlargement, called Hematocele, the scrotum becomes dark, covered with abscesses and sores, and discovers the indications of the bile-born variety. In that variety of the disease which is born of the adeps, * the

* 'Medaja-vridhu' is that variety of Enlargement which is called Elephantiasis of the Scrotum.

scrotum assumes the aspect of a ripe palmyra fruit. Further, it becomes soft to the touch and discovers all the symptoms of phlegm-born enlargement. If one always suppresses the urgings of urine,* one gets enlargement of the scrotum born of urine. The scrotum becomes soft to the touch and painful. Besides, when one walks, the scrotum sinks and rises like a leathern bag full of water. In this variety, the patient sometimes feels pains like those in strangury. The scrotum hangs down if the patient moves about. By eating food that excites the wind, by plunging in cold water, by suppressing the urgings of both stools and urine, by straining to pass stools and urine when no urging is felt, by carrying heavy loads, by walking long distances on foot, by disposing the limbs in improper attitudes, and by doing rash acts that put a severe strain on the system, the wind, becoming excited, contracts one of the small intestines and brings it down towards the groins, and a knotty swelling takes place near either of the groins. This is called enlargement of the intestine or Hernia.† If it be allowed to remain for some time without treatment, the consequence is enlargement and swelling of the scrotum with pain and senselessness of the parts. If the scrotum be pressed, the wind moves upwards, producing a kind of rumbling noise. Sometimes this happens when no pressure is put upon the scrotum. The wind soon returns, however, and causes the scrotum to swell as before. Hernia is incurable.

* 'Mutraja-vridhi', or Enlargement of the Scrotum due to the urine, is known by the name of Hydrocele.

† 'Antravridhi', or Enlargement of the Intestine is called Hernia. Its inclusion within the disease known as Enlargement of the Scrotum is certainly a mistake. It is altogether a separate disease. It should not be regarded as any variety of Enlargement of the Scrotum.

A kind of enlargement of the scrotum arises on the day of the new-moon or of the full-moon, or on the tenth or the eleventh lunar day, in accompaniment with strong fever* characterized by shivering and pain in the whole body or the joints. This enlargement disappears of itself two or three days after. If one of the testicles is swollen the disease is called 'Eka-çirá.' If both, it is called 'Váta-çirá.' •

Every variety of enlargement described above should be treated at the outset; otherwise it becomes difficult of cure, or even

Treatment. incurable. In all enlargements, purgatives constitute the best medicine. The patient should be purged by giving him a sufficient measure of castor-oil, mixing it with milk in the case of the wind-born variety, and with the decoction of the ten roots in the cases of the bile-born and the blood-born varieties. In the phlegm-born and the adeps-born varieties, the three bitters and the decoction of the three myrobalans should be administered, mixing them with the ashes of green barley spikes, of the measure of two annas, and 'Saindhava' salt, for this is a purgative. In the urine-born variety, tapping should be resorted to with a proper instrument for letting out the accumulated water. As regards intestinal enlargement (Hernia), relief may be expected from treatment till the enlargement reaches the scrotum, for if the disease reaches that stage it becomes practically incurable. For relieving Hernia the patient should be given castor-oil mixed with milk that is boiled either with the roots of *Sida cordifolia*, or with *Vanda Roxburghii*, liquorice,

* This distinction is not observed in western medicine; this sort of swelling is known by the name of Orchites.

Tinospora cordifolia, the roots of *Ricinus communis*, *Sida cordifolia* and *Tribulus lanuginosus*. All enlargements are promptly relieved by plasters made of *Acorus calamus* and mustard-seeds, or of the bark of *Moringa pterygosperma* and mustard-seeds, or of ginger and the seeds of *Echites scholaris*, or of the bark of *Calatropis gigantea* (of the white variety) pounded with Kánji. Enlargement of the scrotum may be promptly relieved by wrapping the scrotum with the leaves of *Sesbania aculeata*, heated on a frying pan. Considerable benefit is derived in all varieties of enlargement by using our own 'Koshavriddhi-mahaushadha. The scriptural medicines are 'Bhaktottariya,' 'Vriddhivádhika-vati,' 'Vátári,' 'Catapushpádyá-ghrita,' 'Gandharvahasta-taila,' and those which have been laid down in the chapter under Elephantiasis, such as 'Krishnádimodaka,' 'Nityánanda-rasa' &c., These should be used with discretion. For rubbing the scrotum, 'Saindhavádyá-ghrita,' and those oils and ghees which have been laid down in the chapter on Inflammatory or other swellings, such as 'Punarnavá-taila,' 'Cuskamulkádi-taila' &c., are prescribable. As regards Hernia, when it is in vigour, the patient should use a steel truss which is sure to give him relief.

Old rice of the finer varieties, such pulses as *Phaseolus*
 Diet and forbidden
 practices. *Mungo*, *Cicer lens*, *Cicer arietinum*,
Cajanus Indicus, and such vegetables
 as the fruit of *Trichosanthes dioica*,
 brinjals, potatoes, plantain-flowers, carrots, the fruit of *Ficus glomerata* (of the smaller variety), *Momordica charantia*, the bulbous root of *Colocasia Indica*, the cods of *Moringa pterygosperma*, ginger, the leaves of *Pæderia fædita*, garlics &c., should constitute the meals during daytime. The patient may, at intervals, take a little of goat's meat as also those fishes

that are classed as small. All kinds of bitter things that have purgative properties prove beneficial. The evening meals should consist of 'puris', 'chapatis', curries of the vegetables mentioned above, and a little measure of goat's milk. For drink he should have boiled water made cool. For baths also boiled water should be used. In enlargements of the scrotum, the patient should, besides, tie up the scrotum strongly by using what is called a 'langote.' * New rice, every kind of heavy food, curds, the stalks and leaves of *Basella rubra*, such pulses as *Phaseolus radiatus*, ripe plantain fruit, and too much sweets should be abstained from. Cold water for slaking thirst, journeys on foot, sleep during daytime, suppressing the urgings of stools and urine, baths, eating before the food last taken has been digested, and rubbing the body with oil, produce baneful consequences.

BRONCHOCELE AND ENLARGEMENT OF LYMPHATIC GLANDS.

The wind, the phlegm, and the adeps being excited and vitiated by adequate causes, produce a swelling in the throat, longish like the scrotum. This is known by the name of 'Galaganda', or Bronchocele. It is regarded as of three varieties : 1. wind-born, 2. phlegm-born, and 3. adeps-born. In wind-born Bronchocele, there is piercing pain as if the patient is being constantly pricked with a hundred

* A 'langote' is a long piece of thick cloth worn round the waist more as an apology for covering than a covering of any sort which decency can sanction. Sometimes the 'langote' consists of a triangular piece of cloth, all the angular ends being tied together in a knot below the navel.

needles. The swelling isovers pread with dark nerves. It becomes rough and is of a red colour. The progress of this kind of Bronchocele is very slow, for it takes a long time to enlarge. The patient's mouth becomes tasteless and his palate and throat become dry. This variety of Bronchocele seldom or very rarely terminates in suppuration. Phlegm-born Bronchocele becomes hard, white in colour, heavy, accompanied by intense tickling, cool, and large in size. Its progress towards enlargement is slow, and it is not very painful. The patient has the taste of of honey in his mouth, and the palate and the throat become filled with phlegm. That variety of Bronchocele which is born of vitiated adeps becomes glossy, heavy, pale in colour, endued with a foetid smell, accompanied by a tickling sensation, and slightly painful. Its appearance is like that of a potato, the root being thin while the top is thick. It increases or decreases with the increase or decrease of the body. The patient's face becomes glossy like oil and a gurgling noise is constantly emitted by the throat. That Bronchocele in which the patient feels a difficulty of breathing, in which the whole body becomes soft and lean, and which is accompanied by disgust for food and hoarseness of voice, is regarded as incurable. If the disease be also of more than one year's standing, cure can scarcely be expected.

When the vitiated adeps and phlegm cause enlargements of the lymphatic glands on the shoulders, or along that duct of the neck which is called 'Manyá,' or around the neck and the throat, or in the armpits, the disease is called 'ganda-málá.' The word means a string or series of (enlarged) glands. The shape these

Causes and symptoms of enlargement of lymphatic glands.

glands assume is like that of jujubes or the fruit of *Phyllanthus Emblica*. The enlarged glands slightly suppurate after a long time. If among the glands thus enlarged some suppurate and some become absorbed or disappear, with the result that some new ones become enlarged, the disease is then known by the name of 'Apachi.' If 'Apachi' be accompanied by inflammation of the schneiderian membrane, pains in the sides, cough or bronchitis, fever, and vomiting, it becomes incurable. If unaccompanied by such or other morbid affections, it can be cured.

When swellings of a knotty formation appear on any part of the body, these are called 'Granthi.'

Cystic Tumours.

When, however, fleshy swellings appear that are large and round, fixed or immobile, and accompanied by slight pain, these are called 'Arbuda'. * Since the shape of the swellings in both cases resembles that of the enlarged glands in 'Galaganda,' both these diseases are included in this chapter.

In enlargement of lymphatic glands the treatment should be principally directed to the alleviation of the phlegm. A plaster should be applied on the enlarged glands, consisting of the roots of *Butea superba*, grinded into a paste with water in which 'átapa' rice has been washed. Another plaster consists of mustard seeds of the white variety, the seeds of *Moringa pterygosperma*, linseeds, barley, and the seeds of the garden radish, pounded together with whey. By snuffing 'Vit' and 'Saindhava' salt pounded together with the juice of bitter gourds much benefit may be expected. The patient should drink 'Nityánanda-rasá' and 'Amritádya-taila', and snuff 'Tumbi-taila.'

* 'Granthi' corresponds with what is called 'cystic tumours' in European medicine, while 'Arbuda' is known by the name of tumours.

* The plasters prescribable in Bronchocele may be used in treating Enlarged symphatic glands
 Treatment of enlarged Lymphatic glands. also. The patient should drink the decoction of the barks of *Bauhinia acuminata*, throwing into it a small measure of pulv ginger, or the decoction of the roots of *Capparis trifoliata*, throwing into it a little honey. Considerable benefit is derived, in even cases that are old, from the application of the following plaster, viz., the roots of *Cucumis Colocynthis*, or those of *Clitoria Ternatea* (of the white variety), pounded with cow's urine. The following medicines also are beneficial in this disease, viz., 'Káchanára-guggulu,' for internal administration, 'Cchucchundari-taila' and 'Sindurádi-taila' for external application, and 'Nirgundá-taila' and 'Vilwádi-taila' for use as errhines.

When the enlargement of lymphatic glands develops into 'Apachi', much benefit is derived
 Treatment of 'Apachi.' from the application of a plaster consisting of the bark of *Moringa pterygosperma* and that of *Cedrus deodara*, pounded together with 'kánji' and heated on a fire. Another plaster consists of the following : mustard seeds of the white variety, leaves of *Melia Azadirachta*, and the fruit of *Semecarpus Anacardium*, burnt in a fire and pounded together with goat's urine. Relief may be had by rubbing 'Gunjádyá-taila', as also 'Chandanádyá-taila'.

One afflicted by 'Granthi' (cystic tumours) should take
 Treatment of 'Granthi.' the pulv of Chebulic myrobalans, with the juice of the sugar-cane. Pastors consisting of the flowers of *Bassia latifolia*, the bark of *Eugenia jambolana*, that of *Pentaptera Arjuna*, and that of *Calamus rotang*, pounded together, do much good. By applying plasters made of the roots of *Croton polyandrum*,

those of *Plumbago Zeylanica*, the exudation of *Euphorbia neriifolia*, that of *Calatropis gigantea*, treacle, the seeds of *Semecarpus Anacardium*, and sulphate of iron, suppuration may be brought about of 'Granthi' or cystic tumours. These will then burst, and after the discharge of pus and other foetid matter, become cured. Relief may be had in both 'Granthi' and 'Arbuda' by applying plasters made of carbonate of soda, the ashes of burnt radishes, and the pulv of conch shells. In 'Arbuda', blood-letting is needed. Rubbing these tumours first with the leaves of *Ficus glomerata* (of the smaller variety), or any rough substance, apply plasters made of these, viz., the gum of *Shorea robusta*, *Aglaia Roxburghiana*, red sandal-wood, *Symplocos recemosus*, the extract of *Berberis Asiatica* and liquorice, all pounded together and then mixed with honey. Relief may also be had by first smearing the tumours with the gum of the banian, *Aplotaxis auriculata*, and 'Pānga' salt, and then binding them with banian leaves. Tumours may be reduced by applying plasters made of the seeds of *Moringa pterygosperma*, the seeds of the garden radish, mustard seeds, leaves of *Ocimum sanctum*, barley, and the roots of *Nerium odorum* pounded together with whey. If these medicaments fail to cure 'Granthi' and 'Arbuda', surgical operation must be resorted to.

Diet and forbidden practices.	of diet and forbidden practices apply which have been laid down for enlarge- ment of the scrotum, &c. Hence it is not necessary to repeat them here.
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ELEPHANTIASIS.

This disease, called in Sanskrit 'Clipada', is commonly

known by the name of 'Goda' in Bengal.
Names and Symptoms.

At first pain is felt in the groins. Then swelling appears in the lower part of the legs. At the outset, fever may be seen to manifest itself. Although this disease arises from provocation of the phlegm, yet different symptoms are manifested according as this or that fault becomes predominant. If the wind predominates, the symptoms observable are the following : the swelling assumes a dark colour ; it presents an aspect of dryness ; cracks also may be noticed on it ; it is also accompanied by severe pain. Fever breaks out often, and the pains increase or decrease without any apparent cause. If the bile be predominant, the swelling becomes soft, it assumes a yellow colour, it is accompanied by a burning sensation and fever. If the phlegm predominates, the swelling becomes hard, glossy, white or pale in colour, and accompanied by a sensation of heaviness.

That elephantiasis proves incurable in which the swelling becomes excessive or which
Symptom of incurability. presents numerous elevations like those of an anthill, or which is more than one year old, or in which there is a tickling or itching sensation accompanied by discharges of foetid matter, or in which all the morbid indications supervene of the excited faults.

Instances of this disease are common in those countries

in which old water is accumulated

Treatment.

in a large measure, as also in those

where the weather is cold in all seasons. * Treatment should be begun as soon as the disease appears, otherwise it becomes incurable. Fasts, purgatives, 'sweda', plasters, and such operations as are destructive of phlegm, alleviate this disease. An efficacious plaster consists of *Datura fastuosa*, *Ricinus Communis*, *Vitex Nigunda*, *Boerhavia diffusa* (of the white variety), *Moringa pterygosperma*, and mustard seeds, pounded together. Another plaster consists of the roots of *Plumbago Zeylanica*, *Cedrus deodara*, and mustard seeds of the white variety, or the bark of the roots of *Plumbago Zeylanica*, *Cedrus deodara*, and mustard seeds of the white variety or the bark of the roots of *Moringa pterygosperma*, pounded together with cow's urine and heated on a fire. Relief may be had from also applying a plaster made of the roots of *Calatropis gigantea* (of the white variety) pounded with 'kánji' into a paste. Another very efficacious plaster may be made of the mustard seeds of the white variety, the seeds of *Moringa pterygosperma*, the seeds of *Crotalaria juncea*, linseed, barley, and the seeds of the garden radish, pounded together with the juice of the leaves of *Euphorbia neriifolia*. In the bile-born variety of the disease plasters should be applied consisting of *Rubia cordifolia*, liquorice, *Vanda Roxburghii*, *Solanum nigrum*, and *Boerhavia diffusa*, pounded together with 'kánji.' The plaster

* What is meant by old water accumulating in excessive measure is this : there are countries in which rain is scanty and where the people depend for their water supply on large stagnant lakes. There are countries where the people have no rivers or running streams to draw their water from. Such countries are said to have old water accumulated in excessive measure.

also known by the name of 'Madanádi, is very beneficial. The roots of *Sida cordifolia*, pounded into a paste with the juice of the palmyra tree, relieves all varieties of Elephantiasis. paTṣṭient derives benefit from drinking ghee mixed with the roots, reduced to a paste, of the parasites growing on *Flacourtia sapida*. The roots, again, of such parasites, tied on the thigh, relieve this disease. Another good medicine for internal administration consists of Chebulic myrobalans fried in castor oil and reduced to pulv and mixed with cow's urine.

The scriptural medicines are 'Kanádi-churna,' 'Pippalyádi-churna,' 'Krishnádi-modaka,' 'Nityánanda-rasa,' 'Clipadagajakeçari,' 'Saureswara-ghrita,' and 'Vidangádi-taila.' These should be administered with discretion.

The regimen prescribed in enlargement of the scrotum applies to this disease also. Those Diet and forbidden practices- practices also which should be abstained from in enlargement of the scrotum should be avoided in Elephantiasis.

ABSCESS AND SORES.

Swellings on the body which have the appearance of juice fruits, and which are accompanied by burning and pain, and which in the end ripen and suppurate, are known by the name of 'Vidradhi.' They are principally of two varieties, *vis.*, External and Internal. When the excited faults stationed in the bones, vitiate the skin, the blood, the flesh, and the adeps, the result is the appearance of 'Vidradhi' or abscess. External abscesses may appear on any part of the body. Internal abscesses, however, appear only in such parts as the rectum, the region of the bladder, the region of the navel the abdomen, the groins, the sides, the spleen, the liver, the cardiac region, and the 'kloma' (or that part of the thorax which when dry causes thirst). When an abscess is formed in the rectum, the result is the stoppage of the downward wind. When formed in the bladder, difficulty of micturition, or scantiness of the urine manifests itself. When formed in the region of the navel, hiccup appears, with pain and a rumbling noise in the abdomen. When formed in the abdomen, the usual symptoms of excited wind become predominant. When formed in the groins, severe pain is felt in the throat and the back. When formed in the sides, these become contracted. When formed in the spleen, difficulty of breathing sets in; when formed in the cardiac region, pain is felt in every part of the body, with cough. When formed

in the liver, asthmatic breath and hiccup, and when formed in the 'kloma,' excessive thirst, appears. Besides these especial symptoms, the general symptoms in all varieties of Internal abscess is pain.

When Internal abscesses are formed in those regions of the body which are above the navel, Curability or otherwise. such as the spleen, the liver, the sides, the abdomen, the cardiac region, and the 'kloma,' these ripen and suppurate and at last burst with the result that the pus and other foetid matter escape through the mouth. When formed in regions below the navel, such as the bladder, the rectum, and the groins, then the pus and other foetid matter escape through the rectum. When the pus, &c., escape through the mouth, there is little hope of the patient's life being saved. If, however, the pus escapes through the rectum, hope may be entertained of saving the patient's life. That internal abscess in which flatulence of the stomach, suppression of urine, vomiting, hiccup, thirst, severe pain, asthma, and similar other supervening symptoms appear, is certainly fatal.

Sores are known in Hindu Medicine by the name of 'Vrana.' An inflammatory swelling Causes, &c. of Sores. appears on a particular part of the body. It ripens and suppurates. At that stage it bursts of itself or is opened by the surgeon. The sore that follows is called 'Vrana.' Before suppuration sets in, the symptoms of the swelling are mild heat, hardness, mild pain, and uniformity of complexion with the body. When suppurating, the patient feels as if the swelling is being burnt by a fire or some caustic, or cut open with a knife, or bit by ants, or struck with a stick or club, or pierced with needles, or pressed by some one, or stirred by somebody with his

finger. The heat and burning sensation also increases. It also becomes puffed up like a leathern bag filled with air. The patient begins to writhe like a person bit by a scorpion or a centepede. Fever, thirst, and disgust for food supervene. After suppuration, the pain decreases, the swelling abates, the colour becomes red, the upper skin becomes contracted, and cracks appear on it. If pressed, the swelling sinks. Pus is formed within ; pain like to what is caused by needles, and a constant itching also is felt. When the swelling bursts, or after it is opened by the lancet and the pus is let out, foetid discharges, not copious, take place, 'Throbbing pains continue, while the patient sometimes feels that he is being pierced with needles. Sores are then developed. Sometimes, at this stage, such supervening symptoms as thirst and swoons and fever manifest themselves.

That 'Vrana' which gradually becomes as soft as the lower surface of the tongue, smooth, glossy, free from discharges, level, and only slightly painful, should be regarded as curable. Then, again, that 'Vrana' which is free from discharges as also cracks, and which has begun to granulate, should be regarded as about to be cured. When a 'Vrana' begins to emit a foetid smell, when the discharge from it of pus and blood becomes copious, and when it sinks down into a level lower than the surface of the body, it is regarded as of malignant type. A 'Vrana', again, that remains uncured for a long time, is also regarded as malignant.

Those varieties of 'Vrana' from which fat and marrow are discharged, or which appear in the vital parts of the body, or which are accompanied by excessive pain, or

Incurable and fatal
'Vrana'.

which burn internally but are cold externally, or which cause loss of strength and flesh and have such supervening symptoms as asthma, cough, disgust for food, &c., are regarded as incurable. Those varieties which emit the odor of wine, or of *Aquilaria Agallocha*, or of ghee, or of sandal wood, or of the flower of *Michelia Champaca*, are also fatal. 'Vranas' which are produced by wounds with weapons, or burns by fire, are known by the name of 'Sadya-vrana'. If in such types of 'Vrana' discharges take place of fat, marrow, and oily substances, they should not be regarded, on that account, as incurable.

If after suppuration of a 'Vrana-swelling', the pus and other fetid matter are not properly discharged, mortification gradually sets in of the skin, the flesh, the nerves, the muscles, the joints, the bones, the stomach, and vital parts. The result is sinus from the 'Vrana' towards the interior.

When an abscess or 'Vrana-swelling' manifests itself, the treatment at the outset should be directed towards bringing about its absorption by blood-letting, by mild purgatives, by 'sweda', and by medicines. The absorption of an abscess may be brought about by applying plasters of barley, wheat, and *Phaseolus Mungo*, boiled and reduced to a paste. Another plaster that operates beneficially consists of the roots, reduced to paste, of *Moringa pterygosperma*. 'Sweda' also produces good results. In Internal abscesses before suppuration, the patient should drink the juice of the roots of *Moringa pterygosperma*, mixed with honey, or the decoction of the roots of *Bærhavia diffusa*, of the white variety, or of the roots of *Capparis trifoliata*. Relief may also be had in Internal abscesses, before suppuration, by the patient

Treatment of abscesses
and 'Vrana-swellings.'

drinking the water in which 'Atapa' rice has been washed, mixed with honey and the paste of the roots of *Cissampelos hernandifolia*. 'Varunádi-ghrita' affords much relief in such abscesses. In 'Vrana-swelling,' before suppuration, plasters should be applied of the roots of *Datura fastuosa*, and 'Saindhava' salt, pounded together and heated on a fire, or of the barks of the banian, *Ficus glomerata*, *Ficus religiosa*, *Ficus infectoria*, and *Calamus rotang*, taken in equal quantities, reduced to paste and mixed with a little honey. These plasters cause the absorption of 'Vrana-swellings'.

If the medicines and plasters mentioned above do not succeed in bringing about the absorption of abscesses and 'Vrana-swellings', suppuration should then be brought about and the pus and other matter caused to escape. Poulitices should be applied of the seeds of *Crotalaria juncea*, or of radishes, or of *Moringa pterygosperma*, or sesame, or mustard-seeds, or linseeds, or barley, or wheat. When suppuration takes place, surgical operation proves beneficial. If surgical operation be not resorted to, plasters should be applied of *Galedupa Indica*, *Semecarpus Anacardium*, the roots of *Croton polyandrum*, the roots of *Plumbago Zeylanica*, and the roots of *Nerium odorum*, pounded together with the dung of the pigeon or the crow or the vulture. These cause the abscess or the 'Vrana-swelling' to burst and let out the pus and other fætid matter. The same result may be brought about by laving the abscess or the swelling with water slightly thickened by rubbing in it the tooth of a cow. By applying plasters made of the bark and roots of *Cordia Myxa* and *Bombax Malabaricum*, or of barley, or wheat, or *Phaseolus radiatus*, the pus lying about is collected together and drawn out of the mouth or opening. For washing the sores

Means of bringing about
suppuration.

the decoction should be used of the leaves of *Trichosanthes dioica*, or of *Melia Azadirachta*, or of the bark of the banian. After washing, the following medicines should be applied, viz., 'Karanjadya-ghrira', 'Jiraka-ghrita', 'Játadya-ghrita', 'Játadya-taila', 'Viparitamalla-taila', 'Vranarákshasa-taila', and our own 'Kshatári-taila'. The sores are soon healed by these ghees and oils. If a 'Vrana' becomes malignant, plasters should be applied of the leaves of *Melia Azadirachta*, sesame seeds, the roots of *Croton polyandrum*, and those of *Convolvulus Turpethum*, taken in equal measures, pounded together, and mixed with a little 'Saindhava' salt and honey. In malignant 'Vrana', relief may also be had from plasters consisting of only *Asclepias pseudosarsa*, or of *Physalis flexuosa*, *Picrorrhiza kurroa*, *Symplocos racemosa*, *Myrica sapida*, liquorice, *Mimosa pudica*, and *Grislea tomentosa*. By applying the exudation of *Echites scholaris*, beneficial results may be expected.

If 'Sadya-vrana' be treated at the outset, it would not develop into sores. If any part of the body be cut or wounded by a knife or other sharp instrument, it should be immediately bound up with a piece of cloth dressed in water. By this the blood may be stopped. The juice of the leaves of *Achyranthes aspera*, or those of *Eupatorium Ayapana*, or those of *Celsia Coromandeliana* (Koksima), or those of *Croton polyandrum*, or the juice of *Panicum Dactylon*, also stops the flow of blood from wounds. If a sore be bandaged, after filling the cavity with ghee washed a hundred times and mixed with camphor, granulation sets in, and it is soon cured. If these methods do not produce beneficial effects, then the plasters and oils mentioned above should be applied. If sores be caused by burns,

Treatment of 'Sadya-
Vrana' or wounds.

the oils mentioned should be used. The ashes of barley spikes, mixed with the oil of sesame, or sesame seeds reduced to paste with vaccine milk and the cheese of buffalo's milk, applied to burns as soon as they occur, relieve the pain caused by them. Laving the part burnt with honey and then plastering it with the pulv. of barley, relieves the pain caused by burns.

For treating sinus, the exudation of *Echites dichotoma* (Háparmáli) is a good remedy.

Treatment of sinus.

Plasters should be applied of catechu pounded with the exudation of *Ricinus communis* (of the white variety). Beneficial results, again, are derived from the insertion of sticks made of the fruit of *Zizyphus ænopia*, those of *Randia dumetorum*, the husk of betel nuts, and 'Saindhava' salt, taken in equal measures and pounded with the exudation of *Euphorbia neriifolia* and *Calatropis gigantea*. The insertion into the sinus of also cotton drenched in oil cooked with the ashes of sheep's wool and the seeds of bitter gourds, produces good results. The other remedies are 'Sarjjikádyá-taila,' 'Nirgundi-taila,' 'Hansapádi-taila,' and our own 'Kshatári-taila.' For internal administration 'Saptánga-guggulu' and our own 'Amritavalli-kashaya' should be prescribed.

Old rice of the finer varieties, such pulses as *Phaseolus Mungo* and *Cicer lens*, and curries made of such vegetables as the fruit of *Trichosanthes dioica*, brinjals, *Ficus glomerata* (of the smaller variety), the plantains known as 'Káñchkalá,' plantain flowers, the cods of *Moringa Pterygosperma*, the bulbous root-stock of *Colocasia Indica*, &c., should be taken at day time. The curries should be cooked with ghee and not with oil. If the patient's strength and flesh

Diet and forbidden practices.

diminish, the meat-juice of goat's flesh and other flesh that is easily digestible, should be taken. The evening meals should consist of 'chapatis' and the curries mentioned above. The patient should drink boiled water rendered cool. He should bathe also, at intervals, in similar water. All kinds of food and drink that are heavy or that beget phlegm, as also milk, curds, fish, cakes, all kinds of sweets, sleep at day time, night-keeping, frequent baths, long journeys on foot, and physical exercises, should be abstained from. These are very baneful in these diseases.

FISTULA-IN-ANO

A sinus-like sore sometimes occurs on the side of the anal canal at the distance of two fingers' breadth inwards from its mouth. This sore is called 'Bhagandara' or Fistula-in-ano. The excited faults at first cause a 'Vrana-swelling' in that place. That swelling suppurates and then bursts of itself. Discharges take place of pus and reddish froth. When the sore becomes enlarged, and deepens, it develops into a sinus, through which stools and urine and semen begin to pass. If an inflammatory swelling occurs in the anal canal in any other way, it ripens and suppurates, and then bursts and generates a sinus which soon takes the form of Fistula-in-ano.

All kinds of fistula-in-ano are difficult of cure. There is every likelihood of death arising in that case in which the downward wind, the stools, the urine, and worms escape through the fistula. That fistula which results from a swelling which bursts after having assumed the form of the tooth of a cow is also incurable.

Treatment should be begun before suppuration sets in of the swelling ; otherwise the disease becomes unmanageable. Blood-letting is the principal treatment to be followed at this stage. For causing the absorption of the swelling, plasters should be applied of the leaves of the banian, bricks steeped in water for a long time, dry ginger, and *Boerhavia diffusa*, pounded together. All those methods which

have been spoken of as efficacious in bringing about the absorption of abscesses, &c., should be adopted. If without being absorbed, suppuration sets in, surgical operation should then be resorted to, or bursting should be brought about by applying the medicines laid down in the chapter on abscesses so that the pus and other fetid matter may escape. When fistula has been formed, sticks should be inserted into it made of the exudation of *Euphorbia neriifolia*, that of *Calatropis gigantea*, and the pulv of *Berberis Asiatica*. Washing the sinus first with the decoction of the three myrobalans, take a quantity of the same decoction and rub in it a bone of a cat or a dog. By lavage the sinus with this preparation, beneficial results may be expected. All the oils which are beneficial in ordinary sinus may be used for curing fistula-in-ano. Our own 'Kshatári-taila' promptly relieves this disease. The scriptural medicines are 'Saptavinsatika-guggulu' 'Navakársika-guggulu', and 'Vranagajánkuṣa-rasa'. Our 'Amritavallikasháya', if administered internally, gives prompt relief.

The regimen prescribed for abscesses and ulcerations is beneficial in this disease as well. The same observations regarding forbidden practices apply to this malady. If the digestion is not weakened, the patient may take the flesh of jackals. Such meat does great good to persons suffering from fistula-in-ano.

SYPHILIS AND BUBO.

Syphilis is originated by sexual contact with diseased
Causes. women or with women who rigidly observe sexual continence. Excessive

sexual indulgence, neglect to wash the organ after an act of sexual contact, the use of hot water or water mixed with alkaline ashes for washing, as also wounds on the organ itself, produce this disease. Sexual contact with diseased men, neglect to wash the parts after an act of contact, and the use of similar water for the purpose of washing, produce the disease in women. At the outset small pimples appear on the head of the pennis or on the covering skin. The space around each pimple becomes hard. Those pimples gradually suppurate and burst. Discharges take place of pus, and sloughs accompanied by foetid watery matter. The ulcerated part takes a livid hue. The other symptoms that manifest themselves are fever, nausea, loss of appetite, tastelessness of the mouth, foulness of the tongue, pain in the bones, and headaches. In some cases bubonic swellings appear in the groins. The ulcerations or chancres have elevated edges, with the middle portions depressed or sunk. If this disease is allowed to remain for a long time without treatment, the consequences are the appearance of pimples all over the body with ulcerations here and there. The eyes become weak. The hair begins to fall off. Pains appear in the joints. Inflammation of the schneiderian membrane with loss of the sense of smell, takes place. Sometimes leprosy may also result. Worms also are generated in the ulcerations. The entire pennis itself may drop off from gradual rotting, and death overtakes the patient at last.

‘ For checking syphilitic ulceration, ‘Karanjádya-ghrita’,
 ‘Bhunimbádya-ghrita,’ ‘Vicharchikári-

Treatment.

taila’, and our own ‘Kshatári-ghrita’
 and ‘Kshatári-taila’, should be applied. Another medicine
 consists of this : ‘take a few fruits of *Phyllanthus Emblica*,
Chebulic myrobalans, and *Terminalia Bellerica* ; place
 them in a covered pot ; reduce them to ashes on a slow
 fire. Those ashes, mixed with honey, should be applied on
 the ulcerations. The pulv of *Chebulic myrobalans* and
 sulphide of lead, mixed with honey, produces beneficial
 results, if applied on the ulcerations. The pulv of the leaves
 of *Acacia Arabica*, as also of the bark of *Punica granatum*,
 and of human bones, mixed together, forms a good remedy.
 Before applying these oils and other preparations the ulceration
 should be washed with the decoction of the three myro-
 balans, or with the juice of *Verbesina calandulacea*, or with
 the decoction of the leaves of *Nerium odorum*, *Sesbania*
aculeata, *Calatropis gigantea*, and *Cassia fistula*. For internal
 administration, ‘Varádi-guggulu’, and ‘Rasaçekhara’, are
 very beneficial. When the disease has passed the acute
 stage, the administration of ‘sarsa’ produces good results.
 If ‘sarsa’ be prescribed, our ‘Vrihat-Amritavalli’ and ‘Amrita-
 valli-kasháya’ are undoubtedly the best.

For promptly obtaining relief in syphilis many persons

take mercury. If the mercury taken

After-effects of mercury.

be not of the kind that has been

properly corrected, or if it is administered without the
 necessary precautions, the consequence is that entering the
 system it produces diverse diseases of severe types. Burn-
 ing sensation in the bones, pains in the joints or all over
 the body, ulcerations or the appearance of pimples in
 various parts of the body, black or dark spots on the body,

peeling off of the skin from the palms and the soles, sores in the mouth and the nose, inflammation of the schneiderian membrane, diseases of the mouth, falling off of the teeth, loss of the nose, headaches, paralysis, inflammation of the scrotum, enlargement and inflammation of the glands producing swellings that resemble cystic tumours, diseases of the eye, fistula-in-ano, various kinds of skin-diseases, and even tubercular leprosy, spring from the improper administration of mercury. In these ailments the use of our 'Amritavalli-kasháya' is advisable. It is, indeed, the best medicine that can be prescribed for these diseases. Besides this, 'Panchatikta-ghrita' and the other medicines mentioned in the chapter on leprosy, prove beneficial, if prescribed with discretion. Benefit may also be derived from the patient's taking every day corrected sulphur, of the measure of 4 ratis, with ghee, or 'Garjjan-oil', 10 to 12 drops, with milk. For checking the ulcerations caused by syphilis, the remedies prescribable for ulcerations in general should be used. For curing the skin-diseases brought about by syphilis, 'Somráji-oil', 'Marichádya-oil', 'Mahárudraguduchi-oil', 'Kandarpa-sára-oil', and other oils should be rubbed over the body.

In syphilis. bubo is very generally seen to manifest itself. Buboes may also arise from eating food that is heavy and difficult of digestion, or that generates phlegm, or that consists of dry or putrid flesh. By walking on uneven ground, or walking fast or running, one may get this disease. Inflammatory swellings on the soles, as also wounds, may generate buboes. The fact is the glands in the groins become inflamed. The inflammation is accompanied by fever. Bubo caused by syphilis ripens and suppurates. Other kinds of bubo seldom suppurate.

Causes of Bubo.

• The treatment of bubo of syphilitic origin consists of the application of medicines for bringing about suppuration and then opening it by the lancet for letting out pus, blood, and other foetid matter. If this is not done, the bubo may bring about various other diseases. All those remedies which should be prescribed for causing suppuration of abscesses and inflammatory swellings are applicable in bubo. It should be opened in the same way, and for curing the ulceration the same means should be adopted. If under special circumstances it becomes desirable to bring about the absorption of buboes whether of syphilitic or other origin, the remedies that may produce such a result should be applied at the outset. By setting leeches, or laving the swelling with the exudation of the banian, or applying the liquid portion of the egg of a hen, or plastering the resin (called 'Gandhabirozá') of *Pinus longifolia*, absorption may be brought about. Another remedy for causing the same result consists of this : take four annas of chloride of ammonium, or of nitre. Dissolve it in a chatak of water. Steep a piece of cloth in it. Apply this cloth on the bubo. The cloth should not be allowed to become dry. A few drops of the water should be poured upon it from time to time. Absorption may also be brought about by applying plasters of *Nigella Sativa*, 'Habushá' (black stocks like those of black pepper), *Aplotaxis auriculata*, the leaves of *Cinnamomum*, *Tamala*, and *Zizyphus Jujuba*, pounded together with 'kánji'. For relief of the pain caused, plasters made of *Boswellia serrata*, or of wheat flour, pounded with sheep's milk, should be applied. Febrifuges may be prescribed for checking fever. It is especially necessary in this disease to keep the bowels clean.

Old rice of the finer varieties, such pulses as *Phaseolus Mungo*, *Cicer lens*, *Cicer arietinum*, and *Cajanus Indicus*, curries made of such vegetables as *Trichosanthes dioica*,* *Ficus glomerata* (of the smaller variety), the bulbous root-stock of *Colocasia Indica*, brinjals, the cods of *Moringa pterygosperma*, and old fruit of *Cucurbita pepo*, should be taken at daytime. The curries should be cooked in ghee and not in oil. At intervals, the meat-juice of the flesh of goats, or pegions, or hens, should be taken. The evening meals should consist of 'chapatis' and curries of the same vegetables. If the fever be strong, instead of rice, 'chapatis' or sago should be taken. Sweets, all articles that are cooling, all food and drink that increases the phlegm, milk, fish, baths, sexual congress, sleep at daytime, and physical exercises, should be abstained from. These are especially baneful in syphilis and bubo. _

Diet and forbidden
practices.

TUBERCULAR AND WHITE LEPROSY. *

By eating food composed of such inharmonious ingredients as milk and fish, or food that is liquid and oily, and that is difficult digestion, by eating in excessive measure such articles as new rice, curds, fish, salt, *Phaseolus radiatus*, radishes, sweets, sesame, and raw sugar, by suppressing the urgings of stools and urine and vomiting, &c., by indulging in physical exercises or exposing oneself to the heat of the sun after gorging the stomach with food, by drinking cold water without resting for some time after exposure to the sun or fatigue caused by any toilsome act or before one's agitation has subsided after a panic, by loading the stomach with food while one is suffering from indigestion, by neglecting the usual precautions after taking emetics and purgatives for correction of the faults, by indulging in sexual congress while the stomach is gorged with food, by sleeping at daytime, by insulting seniors and Bráhmans, and by doing similar other sinful acts, one gets such terrible diseases as tubercular Leprosy. This kind of Leprosy may spring also from that form of the same disease which is known by the name of 'Vátarakta', and the vitiation of blood, &c., caused by the improper administration of mercury.

* In Hindu medicine there are two principal classes of Leprosy, each including many varieties. The two principal classes are known by the names, 'Kshudra-kushtha', implying Simple or Light leprosy, and 'Mahá-kushtha', implying Grave or Severe leprosy. In this chapter, both the classes are treated of. They include, as will be seen, many skin-diseases that are not regarded, in European medicine, as varieties of leprosy. Some of the varieties of 'Mahá-kushtha' correspond with tubercular leprosy. 'Mahá-kushtha' also includes several varieties of skin-disease that cannot be included under leprosy, light or grave.

Before the manifestation of this disease, certain portions of the body become smooth or rough to the touch. Copious perspiration, or the entire suppression of perspiration, may be marked. Loss of complexion, burning, itching, black eruptions that constantly itch, and a tickling sensation within the body as if numerous ants are creeping through it, manifest themselves. Certain parts of the body lose the sense of touch. In certain other parts one feels as if one is pierced with innumerable needles. In certain portions, spots appear like to those caused by the bite of wasps. A sense of fatigue is always present. If ulceration sets in owing to wounds, it is accompanied by severe pains. Sores and ulcerations are caused quickly and take a long time to heal. Slight causes intensify an ulceration. Even when the ulceration is cured, the part looks dry. It assumes, again, a dark colour. The hair on that region stands erect.

Although there are infinite varieties of leprosy, yet it is regarded as principally of eighteen varieties. Amongst these, the seven varieties, *viz.*, 1. Kápála, 2. Audumvara, 3. Mandala, 4. Rishyajihva, 5. Pundarika, 6. Sidhma, and 7. Kákana, are included under 'Mahákushtha.*' The eleven other varieties fall under 'Kshudrakushtha.' All these are regarded as skin-diseases in European medicine. That variety of leprosy which is called 'Kápála' is characterised by these symptoms: they are partly dark and partly of a red colour, dry, rough to the touch, and accompanied by pains resembling what is caused by one's being pierced with innumerable needles. Their outer

* All these are different varieties of Tubercular leprosy. 'Sidhma' seems to correspond with *Pityriasis versicolor*. The others have no especial names.

coating is thin. In the 'Audumvara' variety, the eruptions are like the fruits of *Ficus glomerata* in size and colour ; They are, again, accompanied by a sense of burning and itching. The hairs on these swellings assume a tawny colour. In the 'Mandala' variety, some of the patches are white and some are red. They are, again, always moist, covered with sweat, elevated, circular, and confluent. In the 'Rishyajihva' variety, the eruptions have the shape of the deer's tongue. They are coarse or rough to the touch. The edges are red, and the middle portions are dark. They are accompanied by pain. In the 'Pundarika' variety, the eruptive patches take the form of the petals of the *Nymphaea Lotus* ; their colour is red mixed with white. The coating becomes thin. If the affected parts be rubbed, a pulverous substance comes out. The eruptive patches appear thickly on the chest. In 'Kākana' leprosy, the eruptions look like the fruit of *Abrus precatorius*. The middle portions are dark, while the ends are red. They are accompanied by severe pain. The eruptions ripen and suppurate.

In all varieties of Leprosy, as long as the disease affects
 General symptoms. only that ingredient of the body which
 is known by the name of 'Rasa' or
 food-juice, the symptoms are a discoloration of the body, dryness, loss of the sense of touch, horripilation, and excessive perspiration. Gradually, when the disease affects the blood, the consequence is that the blood becomes thick. Itching follows, with suppuration. When the disease affects the skin, the eruptive patches become full and rough. Dryness of the mouth follows. The pain becomes severe and the patient feels as if he were pierced with a thousand needles. Swellings take place which burst and develop into sores. When the disease affects the adeps, the conse-

quences are loss of limbs, incapacity for locomotion, bending of limbs or of the whole body, and increase of the surfaces of the sores. When the malady affects the bones and the marrow, the consequences are depression of the nose and, at last, its total obliteration, redness of the eyes, worms in the ulcerations, and hoarseness of voice.

As long as the disease is confined to 'Rasa,' blood, and the skin, it is possible to cure it. When Curability or otherwise. it affects the adeps, it is capable of suppression. When, however, it affects the bones and the marrow, and is accompanied by worms in the ulcerations, thirst, a sensation of heat or burning, and loss of appetite, it becomes incurable. That Leprosy which is characterised by bursting of the eruptions, followed by discharges of putrid matter, and redness of the eyes, and hoarseness of voice, soon brings on death.

Besides these seven varieties of 'Mahá-kushtha,' there are eleven varieties of 'Kshudra-kushtha' Varieties of 'Kshudra-kushtha' or Simple leprosy.

The symptoms of these eleven varieties are as follow : 1. that in which no perspiration appears, and in which the eruptions occupy a large space and have the form of the scales of a fish, is called 'Eka-kushtha' or Ichthyosis ; 2. that in which the eruptive patches are as rough as the skin of the elephant, dry, dark, and thick, is called 'Charma-kushtha' or Hypertrophy of the skin ; 3. that in which the hands and the feet burst, and in which there is severe pain, is called 'Vaipádika-kushtha' or Psoriasis of hand and foot ; 4. that in which the spots are dry and of a dark colour, and in which the ulcerations are rough to the touch, is called 'Kitima' or Keloid ; 5. that in which the patches are accompanied by itching and covered

with red pimples and eruptions, is called 'Alasaka' or Lichen ; 6. that leprosy in which the spots become elevated, circular, accompanied by itching and full of reddish pimples, is 'Dadru' or Ringworm ; 7. That variety in which the eruptions are of a reddish hue, accompanied by itching as also pain as intense as that of 'çula', covered with large pimples and incapable of being touched without giving severe pain, and in which the flesh becomes putrid and falls off, is called 'Charmadala' or Impetigo ; 8. that which is accompanied by burning and itching and whose principal feature is small pimples from which discharges take place, is called 'Pámá' or Eczema ; 9. when 'Pámá' is accompanied by excessive burning and large pimples or boils, it is called 'Kachcchu' or Scabies ; these appear thickly on the hands and the buttocks ; 10. when boils appear that are either dark or red, and that have a thin coating, they are regarded as a variety of leprosy ; such boils are called 'Vishphotaka' or malignant boils, and 11. that leprosy in which a large number of inflammatory eruptions appear, that are either red or dark in colour, and are accompanied by burning and pain, is called 'Catáru' or Furuncle. Besides these eleven varieties there is another called 'Vicharchchiká' in which pimples appear that are dark in colour and accompanied by itching. Discharges take place from them of foetid matter. When 'Vicharchchiká' or Psoriasis appears in the foot, it is called 'Vipádiká' or 'Vaipádiká'. Of these eighteen varieties of leprosy, 'Sindhma' or Pityriasis versicolor, 'Dadru' or Ringworm, 'Pámá' or Eczema, 'Kachcchu' or Scabies, 'Vicharchchiká', otherwise called 'Vipádiká', or Psoriasis, 'Catáru' or Furuncle, and 'Visphotaka' or malignant boils, may be classed under 'Kshudra-kustha' or Light leprosy. The other varieties, though classed under 'Kshudra-kustha', may fall under 'Mahá-kustha' or tubercular leprosy.

As soon as the incubatory symptoms appear, treatment should be begun ; otherwise the disease becomes incurable. For internal administration the following medicines are regarded as highly efficacious, *viz.*, 'Manjisthádi-páchana', 'Amritádi-páchana', 'Panchanimba', 'Amrita-guggulu', 'Panchatikta-ghrita-guggula', 'Amritabhallátaka', 'Amritánkura-lauha', 'Tálakeçwara', 'Mahá-Tálakeçwara', 'Rasamánikya', and 'Panchatikta-ghrita'. For rubbing and laving on the eruptions, the following medicines are prescribed, *viz.*, 'Mahá-sindurádyá-taifa', 'Somráji-taila', 'Vrihat-somráji-taila', 'Marichádyá-taila', 'Kandarpasára-taila', and the oil, 'Maharudra-guduchi', mentioned in the chapter on 'Vátarakta'. The following plasters also for application on the eruptions, are beneficial : 1. Chebulic myrobalans, the seeds of *Pongamia glabra*, the seeds of *Cassia Tora*, and *Aplotaxis auriculata*, pounded together with cow's urine ; 2. Realgar, orpiment, pepper, mustard oil, and the exudation of *Calatropis gigantea*, pounded into a paste ; and 3. the seeds of *Pongamia glabra*, the seeds of *Cassia Tora*, and *Aplotaxis auriculata*, pounded and reduced into a paste with cow's urine. Cow's urine, if drunk, and the oil of 'Chálmugra', if rubbed on the eruptions, produce beneficial results.* For curing Ringworms, plasters should be applied of 1. *Embelia Ribes*, the seeds of *Cassia Tora*, and *Aplotaxis auriculata*, turmeric, 'Saindhava' salt, and mustard seeds, pounded together into a paste, with 'kánji' ; and 2. the seeds of *Cassia Tora*, the fruit of *Phyllanthus Emblica*, the exudation of *Shorea robusta*, and the exudation of *Euphorbia neriifolia*, pounded together into a paste, with 'kánji.' Our 'Dadrunáçaka' quickly

* 'Chálmugra' is otherwise called 'Kushthavairi', 'Cailarohi', 'Vaivaswata-druma', and 'Mahágadavriksha'. I think it has not yet been identified.

cures this disease. Another medicine consists of the following : take the seeds of *Cassia Tora*, sesame, mustard seeds of the white variety, *Aplotaxis auricalata*, *Piper longum*, and 'Saindhava', 'Sonchála' and 'Vit' salt ; these should be soaked for three days in the 'mantha' of curds ; they should then be reduced to a paste. Used as a plaster, it cures both Ringworms and Psoriasis. By applying plasters of the leaves of *Cassia fistula* grinded into a paste with 'kánji', cure may be effected of Ringworm, Keloid, and Pityriasis versicolor. By rubbing the pulv of sulphur, and the ashes of green barley spikes, mixed with mustard oil, beneficial results may be expected in Pityriasis versicolor. Another good remedy for this disease consists of the seeds of the radish pounded with *Achyranthes aspera*, or with curds, and applied as plasters over the eruption. By rubbing mustard oil cooked with the juice of the leaves of *Calatropis gigantea* and turmeric paste, relief may be expected in Eczema, Scabies, and Psoriasis. Eczema and Psoriasis may also be cured by applying plasters of the new leaves of *Justicia Adhatoda* and turmeric pounded together with cow's urine. Our 'Kshátari' oil is very beneficial in Eczema, Scabies, and Psoriasis.

Besides the eighteen varieties of Leprosy already mentioned, there are two other varieties known by the names of 'Cwitra' or White leprosy, and 'Kilása' or Leucoderma. 'Cwitra' is commonly called 'Dhavala' or White in consequence of the skin assuming a white colour when one is attacked by it. The fact is, in this disease, white spots, more or less extended, appear on the body. In 'Kilása', the spots become slightly reddish. 'Cwitra' and 'Kilása' spring from the same causes which generate Lep-

rosy. If these diseases be neglected for a long time, and if they appear on such parts of the body as are hairless, such as the palms of the hand, the soles of the feet, the lips, the mouth of the rectum, the pennis, &c., they become incurable. That 'Cwitra' in which the spots are separate without being confluent, and in which the hair growing over the spots, without being whitened, remains black as before, which is not of long standing, and which is not the result of burns caused by fire, is curable. Relief is obtained in both 'Cwitra' and 'Kilása' by applying plasters of the seeds of *Vernonia Anthelmintica*, and the dung of the goat pounded together. All the medicines that give relief in Leprosy of every variety, the plasters that have been laid down for Pityriasis versicolor, and 'Kandarpasára-taila' are prescribable in White Leprosy and Leucoderma.

The diet that has been laid down as proper for 'Vátarakta' is prescribable in every variety of Leprosy. Several varieties of Tubercular Leprosy are contagious. One should not, therefore, lie down, or sit, or eat with a person afflicted by Tubercular Leprosy. The breath of such a person should be avoided. His clothes and beds and seats should not be used. Sexual contact with such a person should also be avoided.

Diet and forbidden
practices.

URTICARIA.

In certain parts of the body, eruptions sometimes appear consisting of prominent patches, called wheals. They are of a slightly reddish hue and accompanied by intense heat, great tingling, and excessive itching. The patches and wheals are called 'Citapitta' or urticaria. The disease is commonly called also 'Āmavāta.' Sometimes it is accompanied by pains like to what is caused by needles. Fever and vomiting also supervene. The incubatory indications are thirst, disgust for food, nausea, languor, heaviness of the body, and redness of the eyes.

There are two other diseases which resemble urticaria. They are called 'Udardda' and 'Kotha.' 'Udardda' and 'Kotha.' The former corresponds with what is known as urticaria subcutanea, and the latter with urticaria evanida. In 'Udardda' the wheals are less superficial and fissured deeply. In 'Kotha' they appear and disappear repeatedly, sometimes lasting for weeks and sometimes for months. The chronic intermittent variety of urticaria is known as urticaria evanida. In consequence of exposure to cold winds, both the wind and the phlegm become excited. The predominance of the wind causes 'citapitta'; while the predominance of the phlegm generates 'Udardda.' 'Kotha' results from the administration of emetics which have not acted properly.

If in this disease, the 'āmāçaya' be found to be full with undigested food, the patient should be made to vomit by administering to him the decoction of the leaves of *Trichosanthes dioica*, the bark of *Melia Azadirachta*, and the leaves of *Justicia Adha-*

toda. For purging the patient, half a tola should be given him of the pulv of the three myrobalans, *Balsamodendron Mukul*, and *Piper longum*, taken in equal measures. Rubbing the body with mustard oil and the use of boiled water in a lukewarm state both for bathing and drinking, are beneficial. The other remedies are 1. old treacle mixed with the juice of ginger, 2. two tolas of ghee obtained from cow's milk, mixed with the pulv of pepper of the measure of 2 annas; (this should be taken every morning); 3. 'Haridrākhandā'; 4. 'Vrihat-Haridrākhandā'; and 5. 'Ādrakā-khandā'; all these are for internal administration. Plasters may also be used consisting of 1. turmeric and *Panicum Dactylon* pounded together into a paste; and 2. mustard seeds of the white variety, turmeric, the seeds of *Cassia Tora*, and sesame seeds of the black variety, pounded together with mustard oil. The bowels should always be kept clean in these diseases.

The regimen in these diseases should consist of such articles of food as are bitter in taste. Raw turmeric and the leaves of *Melia Azadirachta*, if taken, produce beneficial effects. The directions about food and forbidden practices laid down in the chapter on 'Vātarakta' apply to these diseases as well. The patient should use boiled water in a lukewarm state for bathing. The body should always be kept covered with warm clothing.

DYSPEPSIA. *

By eating food consisting of such inharmonious ingredients as milk and fish, or food that is putrid or vitiated, or food that is sour or that becomes sour in course of digestion, or food that provokes the bile, the bile already generated in the system becomes burnt up and produces the disease called 'Amlapitta' or Dyspepsia. The symptoms that manifest themselves are indigestion of the food taken, a sense of fatigue, nausea or vomiting, bitter or sour eructations, heaviness of the body, a burning sensation in the chest and the throat, and disgust for food. When the sour bile takes a downward course, the patient sees green all around him. His mind becomes confused. Nausea appears. Eruptions arise like to those of urticaria evanida. Loss of appetite, horripilation, perspiration, and yellowness of the complexion manifest themselves. When it takes an upward course, the patient vomits, the vomitted matter being green, or yellow, or blue, or dark, in colour; sometimes the colour is like that of water in which flesh has been washed. Besides, the vomitted matter is slimy and mixed with phlegm, and is sour, or pungent, or bitter in taste. Vomiting takes place either when the stomach is empty, or when digestion begins of the food that has been taken. A burning sensation is felt in the throat, the chest, and the abdomen. Headaches, burning of the palms and the soles, heat of the body,

* 'Amlapitta,' literally 'Sour-bile', is that form of Dyspepsia which is accompanied by vomiting or purging, including hæmatemesis, perhaps, of cancer, pyrosis, and acidity. The symptoms described below will explain it better.

excessive disgust for food, fever born of bile and phlegm, innumerable pimples accompanied by great itching, and many other supervening symptoms appear.

The disease is regarded as of four varieties, *vis.*, 1. Wind-born, 5. Phlegm-born, 3. born of wind and phlegm, and 4. born of bile and phlegm. In the wind-born variety, besides the general symptoms already noticed, the especial symptoms are shivering, delirium, swoons, a tingling sensation throughout the body, langour, deep-seated pains like to what is caused in 'çula,' vision of darkness all around, confusion of the mind, stupefaction, and horripilation. In the phlegm-born variety, the symptoms are the emission of phlegmonous secretions from the mouth and the nose, dulness and heaviness of the body, disgust for food, a sensation of cold, and excessive sleep. In that variety of the disease which is born of both wind and phlegm, the especial symptoms are bitter, sour, or pungent eructations, a burning sensation in the chest, the throat, and the abdomen, giddiness of the head, swoons, disgust for food, vomiting, inactivity, headaches, watery secretions from the mouth, and the presence in the mouth of a sweet taste. When 'Amlapitta' takes a downward course, the symptoms are capable of being mistaken for those of diarrhœa. If, again, it takes an upward course, the symptoms are capable of being mistaken for those of Nausea and Vomiting. Hence, careful observation is necessary to diagnose the disease.

If treatment is not commenced at the outset, the disease becomes difficult to cure. Hence treatment should be commenced as soon as the disease manifests itself. If there be intense burning, or if the bowels be constipated, or if the phlegm be predo-

Different varieties of the disease and their symptoms.

born, 5. Phlegm-born, 3. born of wind and phlegm, and 4. born of bile and phlegm.

Treatment.

minant, then corrective treatment by the proper administration of emetics and purgatives should be adopted. In the phlegm-born variety of the disease, the decoction should be administered of the leaves of *Trichosanthes dioica*, those of *Melia Azadirachta*, and the fruit of *Randia dumetorum*, taken in equal measures. The decoction should be mixed with honey and 'Saindhava' salt of the measure of 2 annas. This brings relief to the patient by causing him to vomit. If it be desirable to purge the patient, then the pulv of *Convolvulus Turpethum*, of the measure of 4 to 6 annas, should be administered, mixed with honey and the juice of the fruit of *Phyllanthus Emblica*. Another good medicine for all varieties of the disease consists of the decoction of barley properly husked, *Justicia Adhatoda*, and *Phyllanthus Emblica*, mixed with honey and the pulv of the bark of *Cinnamomum Zeylanicum*, cardamoms, and the leaves of *Cinnamomum Tamala*. The decoction of 1. barley, *Piper longum*, and the leaves of *Trichosanthes dioica*, or 2. of *Tinospora cordifolia*, the wood of *Acacia Catechu*, liquorice, and *Berberis Asiatica*, mixed with honey, produces beneficial results. Relief may also be expected from the decoction of *Tinospora cordifolia*, the bark of *Melia Azadirachta*, the leaves of *Trichosanthes dioica*, and the three myrobalans, mixed with honey. For checking the vomiting induced by this disease, half a tola of the pulv of chebulic myrobalans and the pulv of *Verbesina Calandulacea* should be given, mixed with old treacle. The decoction may also be given of *Justicia Adhatoda*, *Tinospora cordifolia*, and *Solanum xanthocarpum*, mixed with a little honey. This decoction relieves asthma, bronchitis, and fever. For checking the diarrhoea which this disease brings on the bowels laid down in the chapter on Diarrhoea should be prescribed with discretion. If the bowels

be constipated, 'Avipattikara-churna', 'Haritaki-kshanda', and our 'Saratlabhedi-vatiká', should be administered. The scriptural medicines are 'Pippalikhanda', 'Vrihat-pippalikhanda', 'Sunthíkhanda', 'Khanda-kuśhmándaka-avaleha', 'Saubhágya-sunthi-modaka', 'Sitámandura', 'Pániyabhakta-vatí', 'Kshudhá-vati-gudiká', 'Lilávilása', 'Amlapittántaka-lauha', 'Sarbbato-bhadrá-lauha', 'Pippali-ghrita', 'Drákshádya-ghrita and 'Sreevilla-taila', should be prescribed with discretion. 'Dhátരി-lauha', 'Āmalaki-khanda', and the other medicines mentioned with descretion. 'Dhátരി-lauha' prescribed in this disease also. Our 'Culanirvána-churna' is very beneficial in Dyspepsia.

The regimen and the observations about forbidden practices, which have been laid down as applicable to 'çula', apply equally to this disease. All food and drink that are of a bitter taste are very beneficial. In the wind-born variety of this disease, fried paddy, reduced to powder, should be taken, with honey or sugar. The 'manda' of barley and wheat, and other light food should prescribed in Dyspepsia. Our 'Sanjiban-khádya' is well suited to this disease. All kinds of heavy food or food that is difficult of digestion, excessive measure of salt, food that is sweet, or pungent, or sour, all articles that are of keen virtues, sleep at daytime, night-keeping, sexual congress, and drinking are very baneful to one suffering from Dyspepsia.

ERYSIPELAS AND BOILS.

The constant use of saline or pungent food, or food that is of fiery virtues, excites the faults and generates Erysipelas. Appearing at first as a boil on a particular part, Erysipelas gradually spreads over various parts of the body. Erysipelas is regarded as of seven varieties, *viz.*, 1. wind-born, 2. bile-born, 3. phlegm-born, 4. that born of all the faults, 5. that born of wind and bile, 6. that born of wind and phlegm, and 7. that born of bile and phlegm. Amongst these, the variety that is born of wind and bile is called 'Agni-visarpa'; that born of wind and phlegm is called 'Granthi-visarpa', and that born of bile and phlegm is called 'Karddamaka.'

In the wind-born variety of Erysipelas, pains are felt in the head, the chest, the limbs, and the stomach like to what is felt in fever born of the excited wind. Besides, swellings appear. The pain is sometimes of a throbbing kind; sometimes it is piercing as if the patient is being pricked with needles, and sometimes the patient feels as if the parts affected are being broken. A sense of fatigue, and horripilation also manifest themselves. In bile-born Erysipelas the eruptions become red and spread quickly. All the symptoms, again, of bile-born fever appear. In phlegm-born Erysipelas the eruptions are accompanied by itching. They look bright. The symptoms of phlegm-born fever also become apparent. In that form of Erysipelas which is born of all the faults, the symptoms of the above varieties present themselves in a combined form.

That Erysipelas which is born of both wind and bile is, as already said, called 'Agni-visarpa'.
 Symptom of 'Agni-visarpa'. The symptoms that manifest themselves are fever, vomiting, swoons, diarrhœa, thirst, giddiness, pain in the joints, loss of appetite, vision of darkness, and disgust for food. The sense of heat is so great that the patient, besides, feels that his whole body is, as it were, covered with burning coals. Those parts of the body where the eruptions appear become as black as charcoal. Sometimes they become blue or red in colour. Around the eruptions, boils appear that look as dark as if the parts are charred by fire. Such Erysipelas suddenly appears on the chest and other vital parts. The wind, becoming exceedingly provoked, causes pains all over the body. The patient loses consciousness at times. He gets no sleep. The breathing becomes asthmatic and hiccup appears. In consequence of excessive pain the patient gradually becomes weak, languid, and unconscious. Death soon comes to claim him.

Erysipelas born of both wind and phlegm is known by the name of 'Granthi-visarpa'. The eruptions are long, circular, thick, hard, and red; they look, besides, like a series of knots. They are accompanied by excessive pain, violent fever, asthma, bronchitis, diarrhœa, dryness of the mouth, hiccup, vomiting, giddiness, confusion of the mind, discoloration of the body, swoons, a sensation of the body being broken, loss of appetite, &c,

Erysipelas born of bile and phlegm is called 'Karddamaka'.
 Symptoms of 'Karddamaka'. The eruptions consist of pimples that are yellow, or red, or dark, or of a pale colour. They are smooth, dry, filthy, swollen, and heavy-looking. There is internal suppu-

ration. They are, again, hot to the touch ; sometimes they are moist, cracked, of the colour of rotten mud, and possessed of the fœtid scent of corpses. The flesh gradually rots and drops off, and the nerves and muscles become bared. They are accompanied by fever, dulness, sleep, drowsiness, langour, headaches, convulsions, stickiness of the mouth, disgust for food, giddiness, swoons, loss of appetite, pain in the bones, thirst, weakness of the senses and stools containing undigested matter. The ducts of the body gradually become obstructed.

Sometimes when any part of the body is wounded by means of a weapon or the nails or the teeth of some one, small boils arise of the form of *Dolichos biflorus*, that are either dark or red in colour. These eruptions are known as a variety of Erysipelas. They are included in the bile-born variety.

Fever, diarrhœa, vomiting, a sense of fatigue, disgust for food, indigestion, cracks on the skin as also the flesh, are some of the supervening symptoms of the disease.

Amongst all the varieties of Erysipelas, those which are born of the wind, or the bile, or the phlegm, are curable. If the disease appears on the vital parts of the body, it becomes very difficult to cure. Erysipelas born of all the three faults, that born of wounds, and that which is born of wind and bile and called 'Agni-visarpa', are incurable.

By eating food that is pungent, or sour, or of keen virtues, or hot, or that causes a burning sensation in the stomach owing to the acidity it produces, or food that is dry, or raw, or consisting of alkaline ashes, or by loading the stomach with food before

the food last taken has been digested ; by exposure to the heat of the sun, the faults, especially the bile and the blood, become excited and produce boils. Another potent cause is the change of seasons. At such times one should take particular care of oneself. Neglect to do this leads to the excitement of the bile and blood and, therefore, the appearance of boils on the body. Boils may appear on any particular part or every part of the body. The seats of the boils have a charred appearance. Fever sometimes accompanies these boils.

Wind-born boils assume a dark hue. They are accompanied by headaches, pains like to those caused by 'çula', fever, thirst, and pains in the joints. Bile-born boils become yellow or red in colour. They ripen and suppurate, and discharges take place from them of pus and other fetid matter. They are accompanied also by fever, burning, pains, and thirst. Phlegm-born boils assume a pale colour. They are slightly painful, and accompanied by itching. They take a long time in suppurating. The other symptoms are vomiting, disgust for food, and dullness of the body. Those boils which are born of two faults present the symptoms, in a combined state, of each of those faults. Similarly, boils born of all the three faults manifest the symptoms, in a state of union, of every one of the faults. They become hard and red, and slightly suppurate. The edges are elevated, the middle portions are depressed. They are accompanied by burning, thirst, stupefaction, vomiting, swoons, pains, fever, delirium, shivering, and sleepiness. If the blood be vitiated, boils are generated of a red colour like that of the fruit of *Abrus precatorius*. A variety of Erysipelas also springs from vitiated blood, the symptoms of which resemble those of bile-born Erysipelas.

Amongst the several varieties of Erysipelas those which are born of only one fault are curable. Curability or otherwise. Those which are born of two faults are always difficult of cure. Those that are born of all the faults, as also that which is born of vitiated blood, and those in which the supervening symptoms are many, are regarded incurable.

If there is predominance of the phlegm in Erysipelas, emetics should be administered. If the Treatment of Erysipelas. bile predominates, purgatives should be given. Amongst emetics these produce beneficial results : 1. the decoction of the leaves of *Trichosanthes dioica*, *Melia Azadirachta*, and the seeds of *Holarrhena antidysenterica*, and 2. the decoction of *Piper longum*, the fruit of *Randia dumetorum* ; and the seeds of *Holarrhena antidysenterica*. For purging the patient the decoction should be given of the three myrobalans, mixed with ghee of the measure of 2 annas and the pulv of *Convolvulus Turpethum* of the measure of 4 annas. This medicine relieves fever as well. In wind-born Erysipelas, plasters should be applied of *Vanda Roxburghii*, *Nymphaea stellata*, *Cedrus deodara*, *Pterocarpus Santalinus*, liquorice, and *Cida cordifolia*, taken in equal measures and pounded into paste with ghee and cow's milk. In bile-born Erysipelas plasters should be applied made of the hanging roots of the banyan, *Tinospora cordifolia*, plantain flowers, and knots of lotus stalks, pounded together and mixed with ghee that has been washed a hundred times. In phlegm-born Erysipelas the plasters prescribable are those of the three myrobalans, 'Padmakáshtha', the roots of *Andropogon muricatus*, *Mimosa pudica*, the roots of *Nerium odorum*, *Asclepias pseudosarsa*, and the roots of *Arundo Karka*. In those varieties of Erysipelas which are born of two faults

or all the three, plasters should be applied of drugs that relieve the particular faults excited or all the faults. The drugs mentioned above should, therefore, be combined. In all varieties of Erysipelas the decoction of 1. 'Padmakastha' the roots of *Andropogon muricatum*, liquorice, and *Pterocarpus santalinus*, as also 2. of the buds of *Ficus Indicus*, *Ficus religiosa*, *Ficus infectoria*, *Ficus glomerata*, and *Mimusops Elengi*, does great good. In all varieties of the disease plasters may be applied consisting of these ten ingredients, viz., *Mimosa sirissa*, liquorice, *Tabernamontana Coronaria*, *Pterocarpus santalinus*, cardamoms of the larger variety, *Nardostachys Jatamansi*, turmeric, *Berberis Asiaticus*, *Aplo-taxis auriculata*, and *Pavonia odorata*. The decoction of these seven, viz., *Ophelia chirata*, the bark of *Justicia Adhatoda*, *Picrorrhiza kurroa*, the leaves of *Trichosanthes dioica*, the three myrobalans, *Pterocarpus santalinus*, and the bark of *Melia Azadirachta*, relieves all varieties of Erysipelas as also fever, burning, inflammation, itching, thirst, and vomiting.

For the relief of boils, plasters should be applied of the buds of *Holarrhena antidysenterica* Treatment of boils. pounded into a paste with water in which rice has been washed. For relieving the burning in boils, plasters should be applied of *Pterocarpus santalinus*, *Mesua ferrea*, *Asclepias pseudosarsa*, *Amaranthes spinosus*, the bark of *Mimosa sirissa*, and the flowers of *Jasminum grandiflorum*, pounded together. Another plaster which consists of the bark of *Mimosa sirissa*, *Tabernamontana coronaria*, *Cedrus deodara*, and *Siphonanthus Indica*, is beneficial in boils of every kind. Plasters of the bark of *Mimosa sirissa*, *Ficus glomerata*, and the bark of *Eugenia Jambolana*, applied on the boils, and the decoction of the same, used for fomenting boils, prove very beneficial.

In Erysipelas and boils, the scriptural medicines are 'Amritádi-kasháya', 'Navakasháya-gugulu', 'Kálágnirudra-rasa', 'Vrishádyaghrita', and 'Panchatikta-ghrita', for internal administration. For applying to the parts affected, 'Karanja-taila', and our 'Kshatári-taila', are highly efficacious. By taking also our 'Amritavalli-kasháya' the patient may derive much good. This allays both the malady promptly.

The observations laid down about food and forbidden practices in the chapter on 'Vátarakta' and Leprosy, are applicable to Erysipelas and boils. One suffering from these diseases should attend to them duly.

MEASLES AND SMALL POX.

'Románti', otherwise called 'Háma' in common parlance in Bengal, is the disease called Measles in European medicine. 'Masuriká', otherwise known by the name of 'Vasanta', is small pox. Small red or reddish pimples appearing on the body are known by the name of Measles. When measles manifest themselves, the appearance is presented of the pores of the skin having become slightly elevated. Before the appearance of measles, fever comes, accompanied by great pain. Generally, the fever continues unintermittently for two or three days. It then abates. As soon as the abatement takes place, measles arise. At first they appear on the forehead and the chin. They

then spread over the whole body. The symptoms, of that fever which ends in the appearance of measles are constipation of the bowels or looseness, disgust for food, cough, and difficulty of breathing. If without manifesting themselves fully, measles disappear, the malady becomes difficult of cure. Children generally get this disease.

Food consisting of such inharmonious ingredients as milk and fish, food that is vitiated, the variety, Causes and symptoms of small-pox. of dolichos called 'Simbi', potherbs, such articles of diet as are pungent, sour, or saline, or as consist of alkaline ashes, loading the stomach with food before the food last taken has been digested, and other causes of a similar nature, lead to the appearance of small pox. The disease is called 'Masuriká' because the shape and size of the eruptions resemble those of 'Masura' or the seeds of *Cicer lens*. The premonitory symptoms are fever, itching pain in the body, restlessness of the mind, vertigo, swelling of the skin, redness of the complexion, and redness of the eyes. The disease appears, afflicting particular 'dhátus' of the body. Hence it has several varieties.

When the disease effects the ingredient called 'Rasa', that is, the juices into which the food taken is first transmuted, the eruptions take the form of bubbles on the surface of water. Covered with a thin coating, they are filled with water and their appearance is like that of swellings caused by scalds. When they burst, discharges take place from them of watery matter. This kind of pox is easy of cure. In common parlance, it is called 'Páni-vasanta' i.e. water-pox. When the disease affects the blood, the eruptions assume a red hue; their coatings are thin. They soon suppurate; and when they burst, discharge

occur of bloody matter. If the blood be not very much vitiated, this variety of pox is curable. When the malady affects the flesh, the eruptions are hard, oily, and covered with thick coatings. Severe pains, like to what, is caused by 'çula', occur. Thirst, itching, fever, and restlessness of the mind, appear. Pox that affects the adeps, assumes a circular shape. It is soft, more elevated than usual, thick, bright, and painful. The supervening symptoms are violent fever, mental delusions, restlessness of the mind, and heat. In pox that affects the bones and the marrow, the eruptions are small, dry, flat, and slightly elevated. Their colour is like that of the body. The supervening symptoms are coma and delusions, violent pain, restlessness of the mind, and pain in every part of the body like to what is caused by the bite of the hornet. The patient feels as if his vital parts are being torn out. Pox that affects the semen is bright, minute, and very painful. Seemingly ripe, they are in reality not so. The patient feels as if his body is wrapped round with a wet cloth or blanket. The mind becomes restless. Swoons, heat, and a sense of inebriation also appear.

If the wind predominates in this disease, the pimples become dark or red in colour, dry, accompanied by intense pain, and hard. They take a long time in ripening and suppurating. If the bile predominates, the eruptions become red, or yellow, or dark in colour, and accompanied by intense pain. These soon ripen and suppurate. There is great pain in the joints and bones. The patient feels as if these are being broken. The supervening symptoms are cough, shivering, restlessness of the mind, a sense of fatigue, dryness of the palate, the lips, and the tongue, thirst, and disgust for food. If there is predominance

Condition of the eruptions
according to the fault that
is predominant.

of the phlegm, the eruptions become white, bright, very thick, and accompanied by slight itching and pain. They take a long time to ripen and suppurate. Phlegmonous discharges from the mouth and the nose, a sensation of the body being wrapt round with a wet cloth or blanket, headaches, heaviness of the body, nausea, disgust for food, sleep, drowsiness, and inactivity are some of the symptoms that supervene. If the blood predominates in the system, the pox that appears is accompanied by these symptoms, *viz.*, liquid motions, relaxation of the limbs, burning, thirst, disgust for food, inflammation and suppuration of the mouth, redness of the eyes, violent fever, and some of the indications of bile-born pox. If all the faults be excited, the eruptions become red in colour and flat, the middle portions become depressed, and there is intense pain. The discharges are of an agreeable smell. They are many in number, and they take a long time to ripen and suppurate. There is a variety of pox called 'Charmadala' (Impetigo) in which the voice becomes suppressed, with such supervening symptoms as disgust for food, stupefaction of the whole body, delirium, and restlessness of the mind.

Among the diverse varieties of pox, that which is born of all the three faults, that which is called 'Charmadala;' and those which affect the flesh, the adèps, the bones, the marrow, and the semen, are incurable. That variety of the disease also in which some of the eruptions are red like corals, some dark like the ripe fruit of *Eugenia Jambolana*, and some like the fruit of *Garcinia Xanthohymus*, is incurable. That pox also in which such symptoms supervene as cough, hiccup, burning, delusions, restlessness of the mind, painful and intense fever, delirium, swoons, thirst

Curability or otherwise.

burning, whirling of the body, excessive sleep, bloody discharges from the mouth, the nose, and the eyes, gurgling noise in the throat, and difficult and painful breathing, should be regarded as incurable. If a person who is afflicted with pox feels very thirsty, and if such symptoms supervene as hysterical convulsions, or if he exhales long breaths through only the nose and not the mouth, death soon occurs.

In some cases inflammatory swellings are seen to appear in the joints of the arms as also the shoulders, after the pox has been cured. These swellings are very painful and very difficult to cure.

In both these diseases it is not proper to adopt operations that are very drying or very cooling. By adopting operations that have the effect of drying the system greatly, the appearance of the eruptions is checked, with the consequence that the disease becomes painful and difficult to deal with. Cooling operations, again, adopted in excess, bring about the excitement of the phlegm and bronchitis and such other diseases which render the original malady very painful. If the pimples do not come out properly, the patient should be rubbed with butter mixed with the juice of raw turmeric, or the juice of the leaves of *Momordica monodelpha*, or the juice of *Asparagus racemosus*. At this stage of the disease another medicine, for rubbing the body with, is the juice of the leaves of *Ocimum sanctum*, mixed with *Phychotis Ajowan*, reduced into paste. At the outset, after, that is, the latent or incubatory stage has passed away, the infusion of *Trigonella fœnum-græcum*, or the decoction of *Aplotaxis auriculata*, the leaves of *Ocimum cordatum*,

the roots of the aquatic weed called 'Páná,' and the roots (not the bulbous root-stock) of *Colocasia Indica*, if drunk, produces much good. In measles the patient should be made to inhale the smoke of dry sticks made of *Acorus Calamus*, ghee, the outer coating of bamboo, barley, the roots of *Justicia Adhatoda*, cotton seeds, *Gratiola Monniera*, the leaves of *Ocimum sanctum*, *Achyranthes aspera*, and lac, pounded together. If mucous secretions and bronchitis supervene, either 'Makaradhwaya' or 'Lakshmivilása', should be given, with the decoction of liquorice.

At the first stage of small-pox the patient should be given the decoction of the creeper called 'Kantákumbháru',* mixed with assafœdita of the measure of 2 annas. The roots of the betel-nut tree, or of *Guilandina bonducella*, or of *Tribulus lanuginosus*, or of *Asclepias pseudorsarsa*, pounded into paste and dissolved in water, should also be administered. In wind-born small-pox, the decoction should be given of these drugs, viz., the ten roots, *Justicia Adhatoda*, *Berberis Asiatica*, the roots of *Andropogon muricatum*, *Hedysarum Alhagi*, *Tinospora cordifolia*, coriander seeds, and the tubers of *Cyperus rotundus*. Plasters should also be applied on the body consisting of the bark of *Rubia cordifolia*, that of *Ficus Indicus*, that of *Ficus infectoria*, that of *Mimosa sirissa*, and that of *Ficus glomerata*. When the pimples are about to ripen, the patient should take the decoction of *Tinospora cordifolia*, liquorice, *Vanda Roxburghii*, the larger group of five roots, *Pterocarpus santalinus*, the fruit of *Gmelina arborea*, the roots of *Sida cordifolia*, and the roots of *Flacourtia sapida*, or the decoction *Tinospora cordifolia*, liquorice, *Vitis Vinifera*, the

* A kind of thorny creeper, called in Bengali, 'Kumuriá'. Not identified.

roots of the sugarcane, and *Punicum granatum*. In bile-born pox, the decoction should be given of the bark of *Melia Azadirachta*, *Oldenlandia biflora*, *Cissampelos hernandifolia*, the leaves of *Trichosanthes dioica*, sandal wood of both the white and the red varieties, the roots of *Andropogon muricatum*, *Picrorrhiza Kurroa*, *Phyllanthus Emblica*, the bark of *Justicia Adhatoda*, and *Hedysarum Alhagi*. The decoction should be given when it has cooled, and a little sugar should be mixed with it. For relieving the sores or ulcerations of bile-born pox, as also the burning sensation it causes, plasters should be applied of the barks of these, viz., *Mimosa sirissa*, *Ficus glomerata* (of the larger variety), *Ficus religiosa*, *Dillenia Indica*, and *Ficus Indica*, pounded into paste with cold water and mixed with ghee. In the phlegm-born variety, the decoction should be given of *Justicia Adhatoda*, the tubers of *Cyperus rotundus*, *Ophelia chirata*, the three myrobalans, the seeds of *Holarrhena antidysenterica*, *Hedysarum Alhagi*, the leaves of *Trichosanthes dioica*, and the bark of *Melia Azadirachta*; and plasters should also be applied of the bark of *Mimosa sirissa*, the bark of *Ficus glomerata* (of the larger variety), the gum of *Acacia catechu*, and the leaves of *Melia Azadirachta*. Treacle mixed with the pulv of jujubes, if taken by the patient, causes the pimples to ripen quickly and suppurate. The decoction of the leaves of *Trichosanthes dioica*, *Tinospora cordifolia*, the tubers of *Cyperus rotundus*, the bark of *Justicia Adhatoda*, *Hedysarum Alhagi*, *Ophelia chirata* the bark of *Melia Azadirachta*, *Picrorrhiza kurroa*, and *Oldenlandia biflora*, produces suppuration and causes the sores to heal quickly. This medicine alleviates fever as well. For relieving the burning sensation, the juice of *Convolvulus repens* is an efficacious remedy.

If discharges of excessive pus take place from the ripened pimples, the pulv of the barks of *Ficus Indicus*, *Ficus glomerata* (of the larger variety), *Ficus religiosa*, *Ficus Infectoria*, and *Mimusops Elengi*, should be scattered over the ulceration. The ashes of burnt cow dung that is obtained in a dried state from fields and highways, and the pulv also of dried cowdung check the formation of pus. At this stage all those medicines which cure ulcerations may be applied. For checking the generation of worms in the ulcerations, the smoke should be applied of *Pinus longifolia*, the exudation of *Shorea robusta*, *Cedrus deodara*, *Pterocarpus santalinus*, *Aquilaria Agallocha*, and *Balasamo-dendron Mukul*. If the pimples having once appeared disappear quickly, the decoctions called 'Nimvadi' and 'Kanchanadi' should be given. One suffering from small pox should use the decoction of the wood of *Acacia catechu* and the leaves of *Dillenia Indica* for purposes of washing the mouth, face, &c.

If pimples appear on the cornea, it should be sprinkled with the decoction of *Tribulus lanuginosus*, *Doodia lagopodioides*, and liquorice. For the same purpose decoctions may be used of these, viz., liquorice, the three myrobalans, the roots of *Sansevieria Zeylanica*, *Berberis Asiatica*, the bark of *Cinnamomum Zeylanicum*, *Nymphaea stellata*, the roots of *Andropogon muricatum*, *Symplocos racemosus*, and *Rubia cordifolia*, also should be used for sprinkling and washing the cornea if pox manifests itself there.

If there is disgust for food with this disease, the patient should be given meat-juice mixed with the juice of sour pomegranates, or the decoction, cooled, of the wood of

Treatment of Accidental
or Supervening diseases.

Acacia catechu, and *Terminalia tomentosa*. If diseases of the mouth or of the throat manifest themselves, gargles should be used of the decoction, mixed with a little honey, of the leaves of *Jasminum grandiflorum*, *Rubia cordifolia*, *Berberis Asiatica*, betel nuts, the bark of *Mimosa suma*, *Phyllanthus Emblica*, and liquorice. By licking the pulv of *Piper longum* and Chebulic myrobalans mixed with honey, the mouth and the throat become cleansed.

The scriptural medicines laid down for both measles and small pox are 'Ushanádichurna,' 'Indu-
 Scriptural medicines. kalá-vatiká' and 'Ēladyarishta.' These should be prescribed with discretion.

At the outset, milk and sago, or milk and barley, or our
 Diet and forbidden prac- 'Sanjibanikhádya,' or other diet of a
 tices ; our 'Sanjiban food.' light kind, should be given, agreeably to the measure of the patient's appetite.

If the appetite improves, and if there be no fever, rice may be given. Curries made of the fruit of *Trichosanthes dioica*, the plantains known as 'káñchkalá,' the fruit of *Ficus gomer-gta* of the smaller variety, may also be given. Among fruits, the patient may take Cabul pomegranates, *Uvæ passæ*, oranges, pine-apples, &c. The body should always be kept covered with a thick cloth. The room in which the patient is kept should be a large and well-ventilated one. The bed should be kept clean. Fish, flesh, all articles of heating virtues, all food that is heavy and difficult of digestion, rubbing the body with oil, and exposure to the wind, are especially baneful in this disease. Small pox is very contagious. Hence, the patient should be segregated as much as possible.

Vaccination is regarded as a good préventive. Formerly,
 Methods of prevention. inoculation was resorted to in this country very extensively. Inoculation,

however, has been declared illegal, and vaccination has been made compulsory. Although the efficacy of vaccination has latterly come to be doubted by many eminent physicians of Europe, yet till a better substitute is found, it should not be abandoned. Another preventive is the seed of the Chebolic myrobalan. Women should wear it on the left arm, and men on the right arm. The efficacy of these seeds thus worn has been tested during many epidemics.

MINOR DISEASES.

Various eruptions are included in the class 'Kshudra-roga' or Minor diseases. Many of them have names assigned to them. For the most part they are regarded as skin diseases in western medicine. A kind of eruptions appear on the bodies of children, called 'Ajagalwiká.' These are small pimples of the shape of the seeds of *Phaseolus Mungo*. They are smooth and bright, and their colour is like that of the body. They look like a series of knots, and are painless. 'Ajagalwiká' corresponds with what are called warts. Sometimes pimples appear which look like barley corns. The middle portions are thicker. They are hard and knotty, and they generally shew themselves on such parts of the body as are fleshy. They are known by the name of 'Yavaprakhyá.' They are really small tubercles caused by the excited wind and phlegm. Larger tubercles sometimes appear, called 'Antrálaji.' They resemble unripe figs. They are elevated, circular, and close to one another. They suppurate although the pus within them is of small quantity. All these varieties of pimp-

les are caused by the action of the excited wind and phlegm. Pimples are seen that resemble ripe fruits of *Ficus glomerata* in colour. They are accompanied by a burning sensation and are circular in shape, and their mouths are open for they burst soon after appearing. The name applied to these ulcers is 'Vivritá.' They are due to the action of the excited bile. Pimples of the shape of tortoises are called 'Kachcchapiká.' They are very hard, and five or six of them are seen clustering together. Born of wind and phlegm, they are in reality enlarged scrofulous glands. Pimples appear on the neck, the throat, the shoulders, the hands, the feet, and the joints, that have many protuberances like anthills. These are called 'Valmika.' They are enlarged scrofulous glands which ripen and suppurate. These eruptions are due to the excitement of the three faults. If neglected at the outset, they increase in size and gain in elevation. Possessed of many mouths or openings, discharges take place from them of foetid matter. They become painful at that time. When pimples arise, arranged in circles like the seeds of the lotus in the torus that holds them, they are called 'Indraviddha' or Herpes. They are born of both wind and bile. Eruptions appear that are circular, elevated, red in colour, accompanied by pain, and covered with small pimples. Born of wind and bile, they are known by the name of 'Garddabhiká.*' Sometimes the glands that are situated at or about the joints of the cheek bones, become inflamed and swollen. Slight pain accompanies. This swelling is known by the name of 'Páshánagarddabha' or Parotitis. It is born of wind and phlegm. Boils accompanied by severe pain appear in the

* These small eruptions over a circumscribed red surface of the body, called 'Garddabhiká', are probably 'Lichen circumscriptus.—T.

cavities of the ears. They ripen and suppurate, and are called 'Panasiká.' A kind of swelling manifests itself that gradually extends like erysipelas, and that is accompanied by burning and fever. This is called 'Jálagarddabha,' or cutaneous erysipelas. It is otherwise called 'Agniváta.' The coating is thin. It seldom suppurates. Rarely, a few pimples are seen to ripen. This disease is born of bile. Carbuncular boils occur on the head, accompanied by severe pain and fever. They are called 'Indravelliká.' They are born of all the three faults. Abscesses sometimes appear on the arms and the sides, and the armpits. They are dark in colour and painful, and are called 'Kakshá.' When boils like 'Kakshá' appear on other parts of the body, they are called 'Gandhamálá.' Both these varieties are born of excited bile.

A boil sometimes appears in the axilla that is accompanied by a burning sensation, like that produced by a living coal. The skin bursts, and fever also manifests itself. This is called 'Agni-rohini.' It is born of the three faults and is incurable. The patient is likely to die between the seventh and the fifteenth day. The excited wind and the bile vitiate the flesh of the nails and cause suppuration. It is accompanied by a burning sensation. The disease is called 'Chippa' or onychia. It is commonly known in Bengal as 'Āṅgulhára.' When the flesh of the nails becomes vitiated and at first the two angles and then the whole of the nail rot off, the disease is called 'Kunakha' or psoriasis of the nails. Pustules appear on the feet, with slight inflammation and without discoloration. There is internal suppuration. The disease is called 'Anuṣayi.' A large abscess appears in the region of the groin, of the size of the fruit of *Convolvulus paniculatus*. It is born of the three faults, and is called

'Vidáriká.' The excited wind and the phlegm sometimes vitiate the flesh, the veins, the muscles, and the adeps, and produce a number of knotty swellings. These burst of themselves and then discharges take place from them of matter like ghee, honey, and fat. In consequence of such discharges, the flesh gradually wastes away, with the result that the sites of the knotty swellings become very hard. This disease is called 'çarkarárbuda' or open bleeding cancers. From the arteries and nerves a foetid scent issues. Discharges also occur of foetid matter of diverse colours. Sometimes hæmorrhage also takes place.

The feet of those persons who have to make frequent journeys on foot, become dry. The consequence is that the soles become cracked. This disease is known by the name of 'Pádadári.' If the soles of the feet receive wounds from treading on gravel or from thorns, knotty swellings appear which are known by the name of 'Kadara.' If the feet be always kept in a wet state through contact with water or mire, sores appear in the interstices of the toes. They are accompanied by burning, itching, and pain. These sores are called 'Alasa.' If the excited wind and bile arriving at the roots of the hairs of the head, cause them to fall away, and if the vitiated phlegm and the blood then shut up the pores from which the hairs grow, the result is baldness of the head. This is known by the name of 'Indralupta' or 'Khálitya.' If the scalp of the head becomes hard and full of cracks, accompanied by itching, the disease is called 'Dárunaka' or *Tinea versicolor* of the scalp. It is born of both wind and phlegm. Sometimes numerous boils, each of small size, appear on the scalp, full of foetid matter of copious measure. These are called 'Arungshiká' or *Tinea favosa*. This disease is born of vitiated phlegm and blood, and worms. Wrath,

or grief, or excessive toil, forces the heat of the body and the bile upwards into the head with the result that the hair becomes prematurely gray. The disease is called 'Palita.' Pimples appear on the faces of young men, which look like the thorns of the *Bombax Malabaricum*. Those eruptions are caused by vitiated wind, phlegm, and blood. Waste of semen, however, is its principal cause. Those pimples are called 'Mukhadushiká' or Acne. Eruptions appear on the skin, covered with small pimples that resemble the prickles on lotus stalks. They are circular, of a pale colour, and accompanied by itching. Born of the excited wind and the phlegm, they are called, 'Padminikantaka.' Sometimes pimples appear on the skin, which are of the shape of the seeds of *Phaseolus radiatus*. They are elevated, dark in colour, and painless. They are called 'Máshaka' or warts. The inducing cause is the excited wind. Pimples appear that are, again, of the size and look of sesame seeds. They are of a dark colour. Born of all the three faults, they are called 'Tilakálaka' or pigmentary nævi or moles. Eruptions manifest themselves which are circular, of a dark or black colour, and painless. They are called 'Njáchccha' or Chloasma. At first only pimples appear. These then coalesce and spread over large districts of the body. Through wrath and excessive toil, the wind and the bile, becoming excited, cause brown spots on the face that are generally circular and painless. They have no elevation above the skin, and are known by the name of 'Vyanga.' In common parlance, they are called 'Mechetá.' If these spots assume a dark hue, they then are called 'Niliká.' 'Niliká' may also appear on the body without being confined to the face.

• If the penis be subjected to pressure or receives wounds from any cause, the foreskin becomes Phymosis, &c., contracted and going down below the head of the penis takes the form of a knotty growth hanging downwards. This disease is called 'Parivartiká' or phymosis. If the wind be predominant, phymosis is accompanied with pain ; if the phlegm predominates, the knotty growth becomes hard and is accompanied by itching. If from any cause the foreskin of the penis becomes upturned in such a way as not to revert to its normal position, the disease is called 'Avapátiká' or paraphymosis. The excited wind, affecting the foreskin of the penis, changes its nature in such a way that being drawn up, it cannot be drawn again. The fact is, the denuded glans cannot be again covered. This sort of contraction is accompanied by pain, and micturition is either suppressed or becomes exceedingly difficult. The urinary jet becomes as thin as a thread. This disease is known by the name of 'Niruddhaprakāṣa.' Sometimes, from suppression of the urgings of stools, the downward wind becomes excited and either shuts up the anal canal or contracts it in such a way as to leave a very small opening. The result is that stools are passed with great difficulty. This disease is called 'Sanniruddhaguda.' If the rectum of children be not properly washed, and if filth occasioned by sweat, stools, urine, &c., be allowed to accumulate, the consequence is the appearance of pimples that are accompanied by itching. By scratching, the pimples burst and produce ulceration. Discharges occur of fœtid matter. This disease is called 'Ahiputanaka' or Erythema. Neglect to bathe or wash the scrotum, causes accumulation of filth on it and the appearance of pimples accompanied by itching. If scratched, these burst and produce ulceration

from which discharges occur of fœtid matter. This disease is called 'Vrishnakachccha' or pruritis of the scrotum. Through excessive straining while passing stools, or weakness of the system caused by copious motions, the anal duct is expelled out from its place. This is known as 'Gudabhraṇṇa' or prolapsus ani. Sometimes particular parts of the body become inflamed. These burst and produce ulcerations. The edges are of a red hue, and they are accompanied by burning, itching, intense pain, and fever. The disease is called 'Varāhadanshtraka' or phlegmonous erysipeles.

If the pimples called 'Ajagawiká' be pierced with the prickles of fresh plants of *Solanum Xanthocarpum*, they then ripen and suppurate and soon disappear. Plasters applied over them of the roots of *Justicia Adhatoda*, and those of *Cucumis colosanthos* prove efficacious. 'Anuṇayi' or pustules appearing in the feet, should be treated as phlegm-born erysipelas, and 'Vivritá' (ulcers like ripe figs) and 'Indraviddha' (Herpes), 'Garddabhi' (Lichen circumscriptus), 'Jálagarddabha' (cutaneous erysipelas), 'Indravelliká' (carbuncle of head), and 'Gandhamálá' (painful abscesses on the skin), should all be treated as bile-born Erysipelas. By applying plasters of the Indigo plant and the roots of *Trichosanthes dioica*, the pain of cutaneous erysipelas may be checked. 'Vidáriká' (large abscess in groin or axilla), 'Panasiká' (boil in the orifice of the ear), and 'Kachchapiká' (enlarged scrofulous glands) may be cured by repeatedly applying leeches, or plasters of the bark of the roots of *Moringa Pterygosperma*, and *Cedrus deodara*. In 'Astrálaji' (tubercles like unripe figs), 'Yavaprakhyá' (small tubercles like barley corn), and 'Páshánagarddabha' (Parotitis), 'sweda'

Treatment of the Minor diseases.

should be applied at the outset. Then plasters made of realgar, *Cedrus deodara*, and *Aplotaxis auriculata*, or fomentation should be applied. When suppuration is brought about, the treatment laid down for boils and ulcerations should be followed. In Parotitis, such plasters are beneficial as check swellings caused by wind and phlegm. In 'Valmika' surgical 'operation' should be resorted to for extracting the suppurating scrofulous glands. The parts should then be cauterised. Upon the ulceration should then be applied the paste of realgar, orpiment, the fruit of *Senecarpus Anacardium*, *Eleitaria cardamomum*, *Aglaia Agallocha*, *Pterocarpus santalinus*, and leaves of *Jasminum grandiflorum*. In cases of 'Pádadári' or cracked soles, plasters should be repeatedly applied of wax, fat, marrow, ghee, and the ashes of green barley spikes. By rubbing the feet also with the exudation of *Shorea robusta*, and 'Saindhava' salt, both reduced to powder, and mixed with honey, ghee, and mustard oil, relief may be had. In 'Alasa' (ulcerations in the interstices of the toes), the feet should first be dipt for sometime in 'Kánji,' and plasters should then be applied on the ulcerations, made of the leaves of *Trichosanthes divica*, the bark of *Melia Azadirachta*, sulphate of iron, and the three myrobalans. Another plaster that operates beneficially consists of the leaves of *Trigonella fenum-graecum* and turmeric, reduced be paste. The exudation of the stalk of *Arum campanulatum* is beneficial. As regards 'Kádara' (corns, these should be extracted by surgical operation and the parts should then be cauterised. For purposes of cantery, hot oil may be used. 'Chippa' (Onychia) requires surgical operation. The part should first be drenched with warm water, and the knife used. For curing the ulceration, the pulv of the dried exudation of *Shorea robusta*, or such oils as are used

for treating ulcerations in general, should be used. Relief may be obtained in onychia by repeatedly applying plasters of chebulic myrobalans rubbed in the juice of raw turmeric placed on an iron plate. By bandaging the affected finger with a few leaves of *Gmelina arborea*, relief may be had in this malady. In 'Kunakha' or psoriasis of nails, the pulv of borax should be inserted within the affected nail. Plasters also should be applied of borax and the exudation of *Echites dichotoma*, pounded together. In that variety of Lichen which is called 'Padminikantaka,' plasters should be applied of the ashes of lotus stalks. The eruptions should also be rubbed with the bark of *Melia Azadirachta* and the leaves of *Cassia fistula*, pounded together into a paste. The pain caused by 'Jálagarddaba' is promptly relieved by applying plasters made of the roots of the indigo plant, and the roots of *Trichosanthes dioica*, pounded together into a paste and then mixed with ghee. In 'Ahiputana' (Erythema), the sores should be repeatedly washed with the decoction of the three myrobalans and catechu. Plasters should also be applied of *Pladern decussata*, galena, and liquorice, pounded together. In prolapsus ani, the expelled duct should first be softly rubbed with cow's fat and then carefully inserted back with the finger into its natural place. A piece of leather with a hole in the middle should be tied upon the rectum for preventing a repetition of the prolapsus. The disease may be checked by the patient using 'Chángerighrita' internally, and by rubbing 'Mushikádyataila' on the rectum. In 'Parivartiká' or phymosis, the turned-up foreskin should first be laved with ghee. Fomentation should then be applied with the heated paste of the seeds of *Phaseolus radiatus*. After it has been made soft by these means,

the foreskin may then be restored to its normal position. A plaster should, however, be applied upon it of warm flesh. In 'Avapátiká' or praptyhymosis the same treatment should be adopted. In 'Niruddhaprakāṣa' or retention of urine caused by strictures in the urethra, tubes or catheters made of gold or silver and rubbed with ghee and other oily substances, should be carefully inserted into the urethra and the urine brought out. For widening the passage, every alternate day a tube slightly thicker than the one last used should be passed. In the disease known as stricture of the rectum, tubes or catheters should be passed in the same way. Warts and pigmentary navi or moles should be removed by surgical operation and the parts should then be cauterised. If warts be rubbed with the pulv of conch-shells, using a stick of the raw stem or branch of *Ricinus communis*, or if the ashes obtained by burning the sloughs cast off by snakes be used for the same purpose, beneficial results may be obtained. For curing Acne, the following plasters may be used : 1. *Symplocos racemosus*, coriander seeds, and *Acorus calamus* ; 2. 'Gorochaná' (concretious found in the gall-bladder of the ox), and the pulv of pepper ; and 3. mustard seeds of the white variety, *Acorus calamus*, *Symplocos racemosus*, and 'Saindhava' salt. Another efficacious plaster consists of the sharp prickles of *Bombax Malabaricum*, or the seeds of *Cicer lens*, grinded into paste with milk. For curing and preventing the extension of 'Vyanga' or brown spots on the face, plasters should be applied of *Pterocarpus santalinus*, *Rubia cordifolia*, *Aplotaxis auriculata*, *Symplocos racemosus*, *Aglaiia Roxburghiana*, new leaves and buds of *Ficus Indica*, and seeds of *Cicer lens*, grinded together into a paste. Other remedies for these spots, as also for those called 'Niliká,' are 'Haridradya-

oil,' 'Kanaka-oil' and 'Kumkumádyá-oil. In 'Arunshiká' or *Tinea favosa*, the head should first be shaved. The sorés should then be washed with the decoction of *Melia Azadirachta*. The juice of horse dung, mixed with 'Saindhava' salt, should then be applied. Plasters also of old mustard oil, with the dung of the cock, grinded together with cow's urine, prove beneficial in this disease. The scriptural medicine called 'Dwiharidrádyá-oil' is also a good remedy. For curing scabs of the head, the head should be washed with water in which have been dissolved the ashes of the straw of 'Kodo-dhán' or *Paspalum scrobiculatum*. Plasters should then be applied of the filaments of the *Nymphaea stellata*, liquorice, sesame, and the fruits of *Phyllanthus Emblica*. 'Triphaládyá-oil' and 'Vahni-oil' are very beneficial in this disease. In baldness of the head, the part that has become bald should be pricked with needles or rubbed with the leaves of *Ficus glomerata* of the smaller variety, or such other leaves as are rough and prickly, for bringing about ulceration. Plasters should then be applied over the ulcerations, made of the red fruits of *Abrus precatorius*. By applying plasters of goat's milk, galena, and the ashes of ivory incinerated according to the method called 'Putá,' grinded together, the growth may be induced of hair. The scriptural remedies are 'Snuhyádyá-oil,' 'Málatádyá-oil,' and the oil of liquorice. For preventing premature whiteness of the hair, the hair should be rubbed with the following preparation, *vis.*, the three myrobalans, indigo leaves, iron, and *Verbesina calandulacea*, taken in equal measures, and subjected to the process called 'Bhávana' with goat's urine.* Another pre-

* 'Bhávará' is the maceration of powders in fluids. The powders are soaked in fluids and allowed to dry in the sun. The process is repeated several times, so that the active principles of the drugs may properly combine.

paration consists of the flowers of *Nymphæa stellata* soaked in milk kept in an iron pot and buried under the earth for a month. The most efficacious remedy, however, is 'Mahánila-oil.' The use of our 'Keçaranjan-oil' cures 'Dárunaka' (Tinea versicolor of scalp), 'Indralupta' (baldness)', and 'Pálitya' (premature whiteness of hair). 'Kakshá', (painful abscess near axilla), and 'Irivelliká', (carbuncle on the head) should be treated like Erysipelas born of bile. In 'Panasiká' (boil in the ear), 'sweda' or fomentation should first be applied. Plasters should then be used of realgar, *Aplotaxis auriculata*, turmeric, and *Cedrus deodara*, pounded together. When suppuration has been brought about, surgical operation should be performed, and the sore or ulceration that is caused should be treated in the usual way. 'Carkarárbuda' or open bleeding cancers should be treated as ordinary boils. In 'Vrishana-kachcchu' or pruritis scrotal, the scrotum should be rubbed with the exudation of *Shorea robusta*, *Aplotaxis auriculata*, 'Saindhava' salt, and mustard seeds of the white variety, pounded together. In fact, this disease should be treated in the same way as 'Páma' or eczema, and 'Ahiputana' or Erythema. Our 'Kshatári-oil,' and 'Marichádya-taila' are good remedies. In Erythema, plasters should be applied of sulphate of iron, 'Gorochaná' (concretions found in the gall-bladder of the ox), sulphate of copper, orpiment, and galena, pounded together with 'Kánji.' In the disease called 'Cukaradanshtraka' or phlegmonous erysipelas, the patient should take turmeric and the roots of *Verbesina calandulacea* pounded together into a paste with cold water and then mixed with ghee of cow's milk. The methods of treatment laid down for erysipelas should also be followed in this disease. In 'Nyachccha' or Chloasma, the part affected should be rubbed with fried borax and the paste of white sandal wood,

or fried borax and honey. All those plasters may also be applied which are prescribable for Pityriasis versicolor. In these and other eruptions, 'Saptachchadádi-taila,' 'Kumkumádi-ghrita,' 'Sahachara-ghrita,' and our 'Himāṇḍrāva' are very efficacious. The treatment of these minor diseases is laid down in brief. The intelligent physician, taking note of the faults excited, and the actual condition of the diseases and the patient, should have recourse to other remedies than those laid down here. In fact, the exercise of discretion is necessary in dealing with these maladies.

The regimen prescribable in these diseases should be such as would alleviate the particular fault or faults that might appear to be excited. Such food and practices should be avoided as have a tendency to aggravate the excited faults.

Diet and forbidden practices.

DISEASES OF THE MOUTH.

Those diseases which affect the lips, the gums, the teeth, the tongue, the palate, the throat, and other parts of the mouth, are known by the general name of diseases of the Mouth. By eating the flesh of animals that dwell in marshy regions, or fish, milk, or curds, &c., in excessive measure, the three faults become excited with the result that diseases of the mouth are generated. In many of the diseases it is the phlegm that predominates.

Among the diseases of the lips those which are born of the wind have these characteristics : the lips become rough, dark in colour, dry, callous to touch, and accom-

Varieties and symptoms of the diseases of the lips.

panied by pains like to those which are caused by needles. Cracks also are seen. In bile-born diseases, the lips become yellow in colour. There is pain and burning. Pimples also appear, covering the entire surface of the lips. These ripen and suppurate. In phlegm-born diseases, the lips become cold to the touch, pale in colour, heavy, slimy, and accompanied by itching. They are painless, and pimples appear that are of a uniform colour with the skin. In those diseases of the lips which are born of the three faults, the colour of the lips sometimes becomes yellow and sometimes white, and pimples of diverse kinds appear and cover them entirely. In those diseases of the lips that are born of the vitiation of the blood, the lips assume the hue of ripe dates. Pimples cover them, and discharges of blood occur. In diseases born of the vitiation of the flesh, the lips become heavy, thick, and elevated like balls of flesh. Worms are generated in their ends or corners. In diseases born of vitiated adeps, the lips become heavy, accompanied by itching, and of the colour of the surface of ghee kept in a pot. Watery discharges of a limpid colour occur. If the lips become diseased in consequence of any wound or violence, pain appears at the outset like to what is caused by cracks or cuts inflicted on them. Subsequently the symptoms appear of the particular fault or faults that may be excited.

Among the diseases that affect the gums, in that which is known by the name of 'cītāda' or Diseases of the Teeth. scurvy, bloody discharges take place from the gums without any apparent cause, and the flesh of the gums begins to gradually rot and fall off. At first a foetid odour emanates. The colour becomes dark. Foetid discharges also begin to take place. The gums become

soft, and then the rotting commences. This disease arises from vitiated phlegm and blood. If swellings appear at the roots of two or three teeth, the disease is called 'Danta-puttaka' or gum-boils. This malady also is born of vitiated phlegm and blood. That disease in which the teeth become loose and in which blood and pus begin to flow from the roots, is called 'Dantaveshta' or inflammation of the sockets. The fact is, the substance of the teeth becomes vitiated. This painful malady affecting the roots of the teeth is born of vitiated blood. That disease in which the teeth become loose, and the gums, palate, and lips become rotten, is called 'Mahāçaiçira' or gangrenous inflammation of the gums. It is born of the excitement of the three faults. If the flesh of the teeth begins to rot, and bloody discharges occur, the disease is called 'Paridara' or bleeding gums. This malady is born of bloody bile and vitiated phlegm. If a burning sensation appears in the gums, followed by suppuration, and if in consequence thereof the teeth fall off, the disease is called 'Upakuça' or inflammation of the gum. It is born of bloody bile. If in consequence of wounds or acts of violence the gums receive any injury and inflammation sets in and the teeth become loose, the disease is called 'Vaidarbha', or inflammation from injury. If in consequence of the excited wind, an extra tooth begins to spring from the root of some tooth, it is called 'Khalivardhana.' When it has fully appeared, all pain ceases. Since, again, this kind of tooth appears when one is of advanced years, it is called 'wisdom tooth.' The wind, becoming excited, sometimes causes many teeth to rise irregularly from the roots of other teeth. Besides being irregular, they present an ugly appearance. This disease is called 'Karāladanta.' It is incurable. If swellings appear in the roots of the

grinders, accompanied with great pain, and slimy secretions take place from those swellings, the disease is called 'Adhimánça.' Besides these, other maladies affect the gums. These produce sores and ulcerations terminating in sinus.

Among the varieties of the diseases that affect the teeth, that called 'Dálana' (Tooth-ache) is very painful. The patient feels as if his teeth are bursting. This disease is wind-born. In the disease called 'Krimidanta' (Caries), black holes appear in the teeth. Painful swellings also appear in the roots, from which slimy secretions occur. The pains sometimes increase without any apparent cause. This disease also is born of excited wind. In the disease called 'Bhanjanaka' (fracture of the teeth), the mouth becomes bent sideways and the teeth break. It is born of wind and phlegm. In the disease called 'Dantaharsha' (Sensitive teeth), the teeth become unable to bear cold, heat, wind, and all things that are sour. The fact is, when brought into contact with these, a painful sensation arises. It is born of wind and bile. Sometimes the flesh of the teeth becomes vitiated, with the result that inflammatory swellings appear both inside and outside the gums, accompanied with great pains. This disease is known by the name of 'Dantavidradhi' (gumboils). Fœtid discharges take place from the swellings. When the swellings burst, blood and pus issue from them. If the secretions of the teeth be dried up by the wind and the bile, the teeth become as rough as gravels. This disease is known by the name of 'Dantaçarkará' (Sordes). If when the accumulated sordes burst, and the teeth also show cracks, the disease is called 'Kapáliká' (hard adherent sordes.) The teeth gradually fall off. If in consequence of vitiated blood and bile, some of the teeth become dark in colour, the disease is called 'çyávadanta' (black or necrosed teeth).

Among the diseases which affect the tongue, in those
 Diseases of the Tongue which are wind-born, the tongue is
 symptoms and varieties. seen to show cracks. It becomes in-
 capable of perceiving taste, and its
 surface becomes thorny. In bile-born diseases, the tongue
 becomes covered with numerous thorns that are red, long,
 and accompanied with a burning ensation. In phlegm-
 born diseases, the tongue becomes heavy and covered
 with fleshy growths which resemble the thick thorns
 of *Bombax Malabaricum*. If a swelling appears below the
 tongue, caused by vitiated phlegm and blood, it is called
 'Alása' or glossitis. If this disease assumes an intense form,
 then the swelling ripens and suppurates and the tongue be-
 comes paralysed. If in consequence of such a swelling that
 is born of vitiated phlegm and blood, the tongue assumes an
 elevated position, and if it is accompanied by burning and
 itching, and if discharges occur of mucous and salivary
 secretions, the disease is called 'Upajihvá' or Ranula.

Amongst the diseases of the palate, the swelling that
 Diseases of the Palate ; appears in the palate, born of vitiated
 symptoms and varieties. blood, and that gradually assumes the
 appearance of a bag filled with air,
 is called 'Galasundi' or Enlarged tonsil. The supervening
 symptoms are thirst and cough. The excited phlegm and
 blood sometimes cause an inflammatory swelling at the root
 of the palate, that resembles, in shape and size, a fruit of
Hibiscus vitifolius. It is accompanied by pain similar to
 what is caused by a hundred needles continuously pricking
 the parts. This disease is called 'Tundikeri' or abscess of
 tonsil. It ripens and suppurates. Another kind of swell-
 ing appears in the palate, born of vitiated blood. It is red
 in colour, and is neither very large nor small. It is accom-

panied by fever and intense pain, and is called 'Dhrusha' or Cynanche Tonsillaris. In consequence of the excitement of the phlegm a swelling appears in the palate that assumes the shape of a tortoise. It is accompanied by slight pain and takes a long time to enlarge. This disease is called 'Kachchapa' or Hypertrophy of Tonsils. Sometimes a fleshy growth appears in the palate, due to vitiated blood. This is known by the name of 'Raktárbuda' or 'Tályarbbuda' (Painful tumour of palate). Sometimes in consequence of the vitiation of the phlegm, a fleshy growth appears in the palate. This is called 'Mánsagháta' or painless tumour of palate. It is free from pain. Through vitiation of the phlegm and the adeps, a painless tumour appears in the palate, of the shape and size of a jujube. This is called 'Táluapputa.' That disease in which the palate repeatedly becomes dry, in which severe pain is felt as if the palate were bursting, and in which the patient's breathing becomes hard, is called 'Táluçsha' or Inflammation of the palate. It is born of the excited wind. Sometimes in consequence of the predominance of the excited bile, the palate becomes inflamed and suppuration sets in. This disease is known as 'Tálu páka' or abscess of palate.

In consequence of the excitement or vitiation of the three faults, many diseases appear in the throat. Surgical operation becomes necessary. In fact, many of them are incurable without such operation. Amongst the diseases of the throat there are two, *vis*, 'Rohni' and 'Adhijihva,' that may be cured by administering medicines and without employing the surgeon's knife. We shall lay down the symptoms of these two first. When the faults becoming excited vitiate the flesh and the blood and cause

Diseases of the Throat ;
symptoms and varieties.

fleshy growths to appear all around the tongue, the disease is called 'Rohini.' These fleshy growths, gradually becoming enlarged, at last close up the ducts of the throat. The patient incurs the risk of immediate death. A fleshy growth appears at the root of the tongue. Its shape is like that of the end of the tongue itself. It is called 'Upajihvá' or Ranula. If it ripens and suppurates it becomes incurable.

Sometimes the whole of the mouth becomes diseased.

Diseases of the mouth
called 'Sarvasara.'

The diseases that affect the whole of the mouth and not any particular part of it are called 'Sarvasara.' In consequence of the excitement of the wind, the whole of the mouth becomes covered with small boils which are accompanied by piercing pains. The patient feels that his mouth is being pierced by a thousand needles. If bile be excited, these boils assume a yellow or red hue, accompanied by intense burning. If the phlegm be predominant, the boils are accompanied by slight pain as also itching. Their colour becomes like that of the surface on which they appear.

In wind-born diseases of the lips, the lips should be

Treatment of the diseases
of the lips.

rubbed with wax mixed with oil or ghee. The pulp also of 'Lobána,' the exudation of *Shorea robusta*, *Balsamodendron Mukul*, *Cedrus deodora*, and liquorice, should be gently rubbed on the lips. If plasters be applied of the exudation of *Shorea robusta*, oil, or ghee, cooked with wax and treacle, they remove the pains and ruffness of the lips, and stop discharges of pus and blood. In bile-born diseases of the lips, the patient should eat and drink things that are bitter. Cooling plasters should be applied. The disease should be treated after the manner of abscesses born of excited bile. In phlegm-born diseases, the lips should be

rubbed with the three bitters, carbonate of soda, and the ashes of green barley spikes, mixed together with honey. In adeps-born diseases of the lips, the application of heat with a piece of cloth is beneficial. The lips should also be rubbed with the pulv of *Aglaia Roxburghiana*, the three myrobalans, and *Symplocos racemosus*, mixed with honey. For curing cracks and sores on the lips, plasters should be applied of the exudation of *Shorea robusta*, red chalk, coriander seeds, mustard oil, ghee, 'Saindhava' salt, and wax, mixed together. In those diseases of the lips, which are born of the three faults, the treatment should be directed towards the alleviation of that fault which may appear to be predominant.

In 'Citāda' or scurvy, garlges should be used of the decoction of dry ginger, mustard seeds, and three myrobalans. By applying plasters made of the pulv of sulphate of iron, *Symplocos racemosus*, *Piper longum*, realgar, *Aglaia Roxburghiana*, and *Cardiospermum Halicacabum*, mixed with honey, beneficial results may be expected in scurvy, for these prevent the rotting of the flesh. By rubbing the teeth with the pulv of *Aplotaxis auriculata*, *Symplocos racemosus*, *Cyperus rotundus*, *Mimosa pudica*, *Cissampelos hernandifolia*, *Piper Chaba*, and turmeric, discharges of blood, itching, and pains may be mitigated. In 'Dantapupputa' (gum-boils), at the outset, blood-letting is beneficial. The five salts mixed with honey, as also the ashes of green barley spikes, if rubbed, produce beneficial results. In 'Chaladanta' or the disease in which the teeth or some of them become loose, much good is done by gargles of the decoction of *Ficus Indicus* and *Ficus religiosa*, and other trees which produce milky juices. Gargles of the decoction

Treatment of the diseases of the Teeth.

also of *Barleria cristata* (of the blue variety) alleviate the disease. The patient, by chewing unripe fruits of *Mimusops Elengi*, may derive much benefit. In 'Dantaharsha' (Sensitive teeth), gargles of mustard oil and other articles which are alleviative of wind, produce good results. In 'Dantaçula' relief may be obtained from gargles of the decoction of *Mimusops Elengi*. In 'Dantabeshta' or inflammation of the socket, blood-letting, gargles of the decoction, mixed with a little ghee and honey, of *Ficus Indicus*, *Ficus religiosa*, and similar other trees, prove beneficial. Much good is also derived by gently rubbing the gums with the pulv of *Symplocos racemosus*, red sandal wood, liquorice, and lac, mixed with honey. In 'çaiçira' or inflammation of the dental periosteum, blood-letting and repeatedly holding within the mouth cupfuls of the decoction of *Ficus Indicus* and the rest, do much good. Plasters also of the pulv, mixed with honey, of *Symplocos racemosus*, *Cyperus rotundus*, and galena, alleviate the disease. The treatment of 'Paridara' (bleeding gums), and 'Upakuça' (inflammation of gum), should be the same as that of 'çitâda' or scurvy. In 'çitâda' or scurvy, gargles of warm water in which has been dissolved the paste of *Piper longum*, mustard seeds of the white variety, dry ginger, and the fruits of *Eugenia acutangula* do much good. The diseases known as 'Dantavaidarbha' (inflammation from injury), 'Adhidanta' (extra teeth), 'Adhimângsa' (swelling round the wisdom tooth), and 'çushira,' are curable by surgical operation. When a sinus has formed in the root of a particular tooth, that tooth should be extracted. If, however, the tooth be one of the upper row, it should not be extracted. Sinus in a tooth-root is cured by frequently holding in the mouth cupfuls of the decoction of the leaves of *Jasminum grandiflorum*, the fruits of *Randia*

dumetorum, *Picrorhizza kurroa*, and *Flacourtia Sapida*, as also by applying mustard oil cooked with *Symplocos racemosus*, catechu, *Rubia cordifolia*, and liquorice. In 'Dantaçarkará' or sordes, the knife should be applied, but in such a way as not to injure the roots of the affected teeth. Removing the sordes by the knife, the pulv of lac mixed with honey should be applied. In 'Kapáliká' or hard adherent sordes, the treatment should be the same as that of 'Dantaharsha' or Sensitive teeth. In 'Krimidanta' or Caries, plasters should be applied of assafoedita heated on a fire. One derives great benefit in this disease by holding in the mouth cupfuls of the decoction, mixed with mustard oil, of *Solanum Indicum*, *Celsia Coromandeliana*, the roots of *Ricinus communis*, and *Solanum Xanthocarpum*. By filling the ears also with the juice of *Phlomis Zeylanica*, sea-foam,* honey, and mustard oil, Caries may be cured. If one chews the roots of *Euphorbia neriifolia*, and holds the chewed roots in one's mouth for sometime, worms are seen to come out of the teeth and teeth-roots to the relief of one suffering from their existence. By applying to the teeth plasters of the legs of crabs reduced to paste, the grinding of the teeth during sleep may be checked. By boiling at least 2 legs of a crab in cow's milk till it becomes thick and laving it on the soles of the feet before one goes to sleep, the grinding of the teeth during sleep may be checked. The scriptural medicines are 'Dantarogáçani-churna' and 'Dantasamskára-churna.' These may be used in almost all kinds of diseases of the teeth. Our 'Dantadhávana-churna' also is very efficacious in all affections of the teeth.

* 'Samudraphena' is literally foam of the sea. The fact is, the thing which sells under that name is a chalky substance existing in layers. Hindu physicians regard it as solidified sea foam, as it is gathered from the sea coast.

In wind-born diseases of the tongue the treatment should be the same as that of the wind-born diseases of the lips. In bile-born diseases of the tongue, the tongue should be rubbed with rough leaves and a little blood let out by this means. After this, the pulv of the following should be rubbed on the tongue, viz., *Asparagus racemosus*, *Tinospora cordifolia*, *Convolvulus paniculatus*, *Phaseolus trilobus*, *Glycine debilis*, *Physalis flexuosa*, *Rhus succedanea*, bamboo manna, the fragrant wood called 'Padmakáshta,' the root-stock of *Nymphaea lotus*, *Sida cordifolia*, the same of the yellow variety, *Vitis vinifera*, *Caloglyne ovalis*, and liquorice. The decoction also of these drugs should be laved on the tongue. In phlegm-born diseases of the tongue, the tongue should similarly be rubbed with rough leaves and a little blood let out by this means. After this, cupfuls should be held in the mouth of the decoction of these drugs, viz., *Piper longum*, the roots of *Piper longum*, *Chavica officinarum*, the roots of *Plumbago Zeylanica*, dry ginger, pepper, *Pothos officinalis*, *Piper aurantiacum*, cardamoms of the larger variety, *Ptychotis Ajowan*, the seeds of *Halarrhena antidysenterica*, *Cissampelos hermandifolia*, cumin seeds, mustard seeds, the fruits of *Melia Azedarach*, assafoetida, *Siphonanthus Indica*, the roots of *Sansevieria Zeylanica*, *Aconitum heterophyllum*, *Acorus calamus*, *Embelia Ribes*, and 'Saindhava' salt. By rubbing the ashes of the incinnerated root-stocks of *Colocasia Indica*, 'Saindhava' salt, and mustard oil, mixed together, on the tongue, and then chewing the filaments of *Citrus medica* and other plants of a similar kind, mixed with the exudation of *Euphorbia neriifolia*, the dulness of the tongue may be removed. 'Upajihbha' or *Ranula* should be rubbed with rough leaves and then the ashes of the green

Treatment of those diseases of the mouth which affect the tongue.

spikes of barley, should be applied on it. The pulv also of the three bitters, Chebulic myrobalans, and the roots of *Piper Chaba*, may be applied instead. Another medicine for *Ranula* is mustard oil cooked with the above drugs.

Almost all diseases of the palate require surgical operation for their cure. Relief is obtained in Treatment of the diseases of the Palate. 'Galasundi' or enlarged tonsil by chewing the roots of *Nyctanthes arbor-tristis*.

Gargles also of decoction of *Acorus Calamus*, *Aconitum heterophyllum*, *Cissampelos hernandifolia*, *Vanda Roxburghii*, *Picrorrhiza kurroa*, and the bark *Melia Azadirachta*, prove beneficial.

In wind-born 'Rohini,' blood-letting at the outset is beneficial. Immediately after, salt should be rubbed upon it, and the patient should hold in his mouth lukewarm mustard oil. In bile-born 'Rohini,' *Pterocarpus santalinus*, sugar, and honey, should be mixed together and rubbed on it. Gargles also of the decoction of *Vitis vinifera* and *Grewia Asiatica* prove beneficial. In phlegm-born 'Rohini,' salt and *Picrorrhiza kurroa*, mixed together, should be rubbed. The patient should also snuff mustard oil cooked with *Clitorea Ternatea*, *Embelia Ribes*, *Croton polyandrum*, and 'Saindhava' salt. In blood-born 'Rohini,' the treatment should be like that of the bile-born variety of the disease. 'Adhijihva' should be treated in the same way as 'Upajihva' or *Ranula*. By rubbing dry ginger and pepper reduced to powder, as also salt and other articles of keen virtues, relief may be obtained in 'Adhijihva.' In all diseases of the throat relief may be obtained by keeping in the mouth balls made of the pulv of 'Kálaka,' *Colocasia antiquorum* of the yellow variety, and 'ksháragudiká.'

In those diseases which affect every part of the mouth, and which are called 'Sarvasara,' gargles should be used of the decoction of the leaves of *Trichosanthes dioica*, the leaves of *Melia Azadirachta*, the leaves *Eugenia Jambolana*, the leaves of *Mangifera Indica*, and the leaves of *Echites Caryophyllata*. Gargles also of the decoction, when cooled, mixed with honey, of the leaves of *Jasminum grandiflorum*, *Tinospora cordifolia*, *Vitis vinifera*, *Hedysarum Alhagi*, *Berberis Asiatica*, and the three myrobolans, cure 'Mukhapáka' or inflammation of the interior of the mouth. By holding the oolv of *Piper longum*, cumin seeds, *Aplotaxis auriculata*, and the seeds of *Holarrhena antidysenterica*, 'Mukhapáka,' sores within the mouth, fœtid secretions, and fœtid smell, are all relieved. 'Saptachchhadádi' and 'Pataládi' decoctions, 'Khadiira-vatiká,' 'Vrihat-khadiravatiká,' 'Vakuládya-taila,' may, with discretion, be prescribed in all diseases of the mouth.

The diet in these diseases should be such as checks the particular fault or faults that may be excited. Generally speaking, all articles that are alleviative of phlegm, are beneficial in diseases of the mouth. The articles that should be avoided in these diseases are fish, the meat of animals that live in marshy regions, curds, milk, treacle and *Phaseolus radiatus*. All articles, again, that are sour, and all that are hard, should also be avoided. The patient should not lie with his face downwards. He should also avoid sleep at daytime. Tooth-sticks should never be used.

IMPOTENCE AND THINNESS OF THE VITAL SEED.

Sexual indulgence at an age when one has not arrived
at maturity, loss of vital seed by onanism or other means of a similar kind,
Causes. and excessive indulgence in sexual pleasure, and other causes of a similar nature produce thinness of the vital seed. The usual characteristic of the disease is the emission of the vital seed at the very thought of sexual congress or at the time the patient passes urine or stools. The patient during sleep suffers loss of semen. Discharge at the very commencement of the sexual act, loss of appetite, constipation or looseness of the bowels, indigestion, vertigo, blackness round the eyes, weakness, loss of energy, and love of solitude, are some of the other symptoms. When the disease is in its intensity, discharge of semen takes place even when there is no erection. The power of erection becomes lost. Hence this disease gradually develops into impotence. Impotence, or loss of virility, may arise from other causes as well. Fear, grief, or mental perturbation from any other cause, sexual congress with a woman that is an object of abomination, the vitiation of the semen-bearing ducts through bubonic and other diseases, abstention from sexual congress when desire has been excited, and eating in excessive measure articles that are pungent, or sour, or saline, and similar other causes, lead to impotency.

the disease is called 'Karnapratináha.' It is generally accompanied by 'Arddhávabhedaka' or Hemisrania. Through excitement of the bile, filth is generated within the ear and fœtid discharges also take place. The disease is called 'Karnapáka' or suppuration in the ears. If fœtid discharges of pus and other matter, from whatever cause, occur, the disease is called 'Putikarna.' Sometimes blood and flesh rot within the ear and worms are generated in the rotten matter. The disease is called 'Krimikarnaka.' Besides these, other diseases, such as 'Vidradhi' or abscesses, 'Arbuda' or tumours, occur in the ears. From the entrance of worms or insects, and wounds, diverse other ailments afflict the ears.

By filling the ears with half a tola of the juice of ginger,
 4 annas of honey, 1 rati of 'Saindhava'
 Treatment. salt, and 4 annas of the oil of sesame,
 mixed together, relief may be obtained in 'Karnaçula' or
 Otolgia, 'Karnanáda' or noises in the ears, 'Vádhirya' or
 deafness, and 'Karnaksheda.' The pains may be alleviated
 by filling the ears with the juice, slightly heated, of any one
 of these, viz., garlics, ginger, the bark of *Moringa petrygos-*
perma, radishes, or the barks of plantain plants. Another
 efficacious remedy for 'Karnaçula' or otalgia is filling the ears
 with the lukewarm juice obtained from the leaves of *Euphorbia*
neriifolia, kept within covers made of the leaves of *Calatro-*
pis gigantea, and heated on a fire, or the juice obtained from
 the leaves of *Euphorbia neriifolia* laved with ghee and heated
 on a fire. In 'Karnanáda' 'Karna-ksheda,' or noises of
 different kinds within the ears, and 'Vádhirya' or deafness,
 relief may be obtained by filling the ears with 'Katu-taila'
 or the 'Másha-taila' mentioned in the chapter on the diseases
 of the nervous system. By using as snuff the decoction

of dry ginger mixed with treacle, one suffering from diseases of the ear derives great benefit. In 'Putikarna' or fœtid discharges from the ears, relief is obtained by filling the ears with the pulv of the barks of *Ficus Indicus*, *Ficus religiosa*, *Ficus infectoria*, *Ficus glomerata*, and *Calamus rotang*, mixed with the juice of *Feronia elephanta* and honey. In 'Karnaguthaka' or wax in the ear, mustard oil should first be applied for softening the wax-like substance, and then removing it by surgical instruments. For killing worms, the ears should be kept filled with the juice of *Cleome viscosa*, *Vitex Nigundo*, *Gloriosa superba*, mixed with the pulv of the three bitters. By applying mustard oil, as also the smoke of *Solanum Melongena*, relief may be had in 'Krimikarnaka.'

If at the time of boring the ears, proper places are not selected, sores, accompanied by great pains, arise. By applying plasters of liquorice, barley, *Rubia cordifolia*, and the roots of *Ricinus communis* pounded together, and mixed with ghee and honey, relief may be obtained. If suppuration takes place, it should be treated like ordinary sores.

The scriptural medicines prescribable in diseases of the ear are 'Bhairava-rasa', 'Indubati' Scriptural medicines. 'Sárivádi,' 'Dwipiká-taila,' 'Apámarga-kshára-taila,' 'Daçumuli-taila,' 'Jamvádya-taila,' 'Cambuka-taila,' 'Niçá-taila,' and 'Kushthádya-taila.' Of course, these remedies are to be applied with discretion.

In diseases of the ear also, such food should be given as alleviates the particular fault or faults that may be noticed to be excited. In 'Karnanáda,' 'Karnaksheda,' Diet and forbidden practices. deafness, and other diseases of the ear which are caused by the excited wind, the treatment should be like that which

is adopted in diseases of the wind or of the nervous system. In 'Karnapāka' or suppuration of the ear, 'Karnagraha' or foetid discharges, and other diseases induced by the excited phlegm, the treatment should be like that of acute Rheumatism. The directions about food and practices that are laid down for acute Rheumatism apply to these diseases also.

DISEASES OF THE NOSE.

That disease in which the phlegm, dried up by the wind, obstructs the nose, in which pain is felt like to what is caused by the exhalation of smoke through the nasal duct, in which the nose becomes sometimes dry and sometimes not so, and in which loss happens of the sense of smell as also of the sense of taste, is called 'Pīnasa' or inflammation of the schneiderian membrane. When this disease is not in its maturity, the symptoms that manifest themselves are heaviness of the head, disgust for food, watery discharges from the nose, weakness of the voice, and repeated discharges of mucous secretions. When it becomes mature, the phlegm, becoming thick, disappears in the nose, the voice improves, but the other symptoms of the immature stage remain. When the wind at the root of the palate becomes vitiated by the action of the vitiated blood, bile, and phlegm, and when that vitiated wind escapes through both the mouth and the nose, the disease is called 'Putinasya' or ozæna. That disease in which the bile in the nose, becoming vitiated, produces a large number of pustules which ripen and suppurate, or in which the nasal canal begins to rot and becomes full of foetid

matter, is called 'Násápáka' (pustules in the nose.) If in consequence of the nerves in the nose becoming vitiated by the action of the excited wind and other faults, or of wounds on the forehead, discharges of blood mixed with pus take place from the nose, the disease is called 'Puyarakta.' When the wind that exists in companionship with the phlegm in that vitated part of the nose which is called 'çringátaka,' becomes vitiated and escapes with a loud sound through the nose, it is called 'Kshavatu' or sneezing. Sneezing also takes place if the sensitive parts of the nose are touched with a thread or any other delicate substance, or if the smell is taken of any keen article, or if one looks at the sun. Such sneezing is called 'Accidental kshavatu.' When the thickened phlegm in the head is burnt up by the heat of the sun or by the excited bile, saline secretions are discharged from the nose. This disease is called 'Bhraṇçathu.' That disease in which a burning sensation is felt in the nostrils and in which the breath becomes as hot as flames of fire, is called 'Dipta' or congestion of nostrils. If the nostrils are obstructed by the excited wind and the phlegm, the disease is called 'Pratināha' or obstruction of the nose. If discharges occur from the nose of mucous secretions that are either thick or watery, and that are in colour either yellow or white, the disease is called 'Násásráva.' When the nostrils and the phlegm in them are dried up by the wind and heated by the bile, and when in consequence of this, breathing becomes very difficult, the disease is called 'Násāçosha.' Suppression of the urgings of stools and urine, indigestion, the entrance of dust or smoke into the nostrils, excessive talk, indulgence in wrath, the change of seasons, night-keeping, sleep at daytime, excessive use of cold water, indulgence in cooling things, exposure to cold, sexual

congress, weeping and other causes thicken the phlegm in the head, and excite the wind. The result is the immediate appearance of the disease called 'Pratiṣyāya' or catarrh in the nose. This disease may also be caused by the wind, the bile, the phlegm, and the blood, that are in the head, becoming vitiated through the respective causes that vitiate them. The fact is, nasal catarrh, when thus caused, does not manifest itself immediately. Before the appearance of this disease, the incubatory symptoms that may be observed are frequent sneezing, heaviness of the head, stupefaction of the body, relaxation or langour of the limbs, horripilation, a sensation of smoke being exhaled from the nostrils, burning sensation in the palate, and watery discharges from the nose and the mouth. In nasal catarrh born of the wind, the nostrils become obstructed; watery discharges take place; the throat, the palate, and the lips become dry, pains are felt in the forehead like to what would be caused by the part being pierced with needles; frequent sneezing, tastelessness of the mouth, and hoarseness of the voice also appear. In bile-born catarrh, the discharges are yellow and hot, and the patient feels as if flames of fire and smoke are issuing out of his mouth and nose. Further, the patient becomes emaciated and pale of complexion, and his body becomes hot. In phlegm-born catarrh, copious discharges occur from the nose of mucous secretions that are pale in colour and cool to the touch. The body becomes white, and the eyes also assume the same colour. The head becomes heavy, and a tickling sensation is felt in the throat, the lips, the palate, and the head. That catarrh which manifests itself, in either a premature or mature state, and disappears, without any apparent cause, should be known to be born of all the faults. In blood-born catarrh, bloody

discharges take place from the nose ; the eyes assume a bloody hue ; a fœtid smell is present in the mouth and the breath, and loss of the sense of smell takes place.

All those varieties of catarrh, in which the breath becomes fœtid, the sense of smell becomes lost, Symptoms of curability and the nose sometimes becomes dry, or otherwise, sometimes wet, sometimes obstructed, and sometimes unobstructed, should be known as severe and not easy of cure. If nasal catarrh be not treated at the outset, it becomes severe and incurable. Minute worms, that are of a white colour, are also generated. If in nasal catarrh, worms appear, the symptoms then manifest themselves of worm-born disease of the head. When the catarrh becomes thick, gradually deafness, loss of vision, various diseases of the eye of a severe type, loss of the sense of smell, swellings, loss of appetite, bronchitis, and inflammation of the schneiderian membrane follow.

Like piles in the rectum, a fleshy growth appears in the nose. It is called 'Násârça' or nasal Nasal piles. piles. In common parlance it is called 'Násâ.' Sometimes a fever appears, which is accompanied by a red swelling within the nostril. This fever becomes intense. Pains appear in the neck, the back, and the waist. The patient feels great difficulty in bending forwards. This fever is regarded as a variety of nasal piles.

In all varieties of inflammation of the schneiderian membrane, the patient should, at the Treatment of Nasal dis- outset, take treacle mixed with pepper cases. reduced to powder. This brings prompt relief. By taking the decoction, or the pulv, of *Myrica sapida*, *Aplotaxis auriculata*, *Rhus succeedanea*, dry ginger, *Piper longum*, pepper, *Hedysarum Alhagi*, and

Nigella sativa, relief may be had in 'Pinasa' or inflammation of the schneiderian membrane, hoarseness of voice, foetid discharges from the nose, and jaundice and other diseases. The medicine called 'Vyoshádya-churna' is beneficial in all diseases of the nose. The pulv of the seeds of *Holarrhena antidysenterica*, assafœdita, pepper, lac, the leaves of *Ocimum sanctum*, *Picrorhiza kurroa*, *Aplotaxis auriculata*, *Acorus calamus*, the seeds of *Moringa pterygosperma*, and *Embelia Ribes*, if taken as snuff, cures 'Putinasya' or ozæna. Relief may also be obtained in this disease by snuffing 'Sigru-taila' and 'Vyághri-taila.' In 'Násápáka' or pustules in the nostrils, the treatment should be such as is alleviative of bile. Plasters may also be applied of the barks of *Ficus Indicus*, and other trees which yield exudations like milk, pounded into a paste and mixed with ghee. In that disease in which blood mixed with pus is discharged from the nostrils, the patient should use such snuffs as are alleviative of bloody bile. All those medicines also may be used which have been mentioned in the chapter on Bloody Bile. In 'Kshavatu' or sneezing, the patient should use the smoke of sticks made of these ingredients, *vis.*, ghee, *Balsamodendron Mukul*, and wax, mixed with the paste, as also the decoction, of dry ginger, *Aplotaxis auriculata*, *Piper longum*, the roots of *Egle marmelos*, and *Vitis vinifera*. By applying plasters on the head made of the fruit, fried in ghee, of *Phyllanthus Emblica*, pounded into a paste with 'kánji,' discharges of blood from the nose may be checked. In 'Pratiçyáya' or catarrh of the nose, the patient should snuff the pulv of the seeds of *Moringa pterygosperma*, *Embelia Ribes*, and pepper; or take the pulv of the seeds of *Circuma Zerumbet*, *Phyllanthus Niruri* and the three bitters, mixed with ghee and old treacle; or take every day the leaves of *Sesbania*

acilleata, burnt according to the method called 'Putā,' and mixed with mustard oil and 'Saindhava' salt. 'Chitra-ka-haritaki' and 'Lakshmivilāsa-rasa' are very efficacious medicines for this disease. In 'Nāsārṇa' or nasal piles, 'Karavirāḍya-taila,' and 'Chitrak-taila' should be used. The fleshy growth, filled with blood, should also be punctured with a needle and the accumulated blood let out. After this, the patient should snuff the exudation, mixed with salt, of *Calatropis gigantea*, or mustard oil, or the expressed juice of the leaves of *Ocinum sanctum*. If the fever that accompanies nasal piles does not abate notwithstanding this, the patient should take such medicines as check fever. It should be noted that 'Āhavāri-rasa' and 'Candanādi-lauha' are efficacious medicines in this fever. The use of 'Durvādi-taila' for snuffing is very beneficial in this disease. Those who get this disease often, should, every day, while cleaning the teeth with a tooth-stick, let out a little blood from the gums. By using the snuff also of tobacco leaves they are sure to derive great benefit.

In nasal catarrh, and inflammation of the schneiderian membrane with loss of the sense of smell, and other diseases of the nose which are caused principally by excited phlegm, the regimen should be such as is alleviative of phlegm. If the phlegm be greatly excited, rice should not be taken. Instead, chapatis of wheat flour, or some other food that is dry and light, would be proper. In discharges of blood and pus, pustules in the nostrils, and other diseases caused by the excited bile, the regimen should be such as is alleviative of the bile, and beneficial in bloody bile. In the fever that accompanies nasal piles, the patient should not indulge in anything that is too much drying in its

Diet and forbidden practices.

effects. For all that, if the fever be strong, the patient should, for the first two days, abstain from rice and take such food as is light.

DISEASES OF THE EYE.

By suddenly plunging into cold water after exposing oneself to the sun, by looking for a long time at a distant object, by constantly looking at minute objects, by sleeping at daytime, by night-keeping, one gets diseases of the eye. Such causes also as the accession of sweat, dust, and smoke into the eye, suppression of the urgings of vomiting, or excessive vomiting, eating liquid food at night, suppression of the urgings of stools, of urine, and of the downward wind, crying often and each time for too long a period, indulgence in wrath and grief, wounds on the head, excessive drinking, change of seasons, checking the flow of tears, &c., excite the faults and bring about different kinds of eye-diseases.

There are many diseases of the eye. Most of them require surgical operations for their cure. Many, again, are incurable. We shall here indicate a few of those diseases which are curable by medicine. 'Abhishyanda' of the eye, or Ophthalmia, is a disease that is very common. It is of four kinds, *viz.*, 1. wind-born, 2. bile-born, 3. phlegm-born, and 4. blood-born. In wind-born Ophthalmia, piercing pains are felt as if the eye is being continually pricked with needles. The other symptoms are dulness of the body,

Causes of diseases
of the Eye.

'Abhishyanda' or Ophthalmia.

horripilation, a painful sensation of the presence of sandgrains in the eye, dryness, headaches, and the falling of cold tears. In bile-born ophthalmia, the symptoms that manifest themselves are a burning sensation in the eye, accompanied by inflammation, a desire for applying cooling things to the eye, and copious tears. In phlegm-born ophthalmia, the symptoms are a desire for the touch of warm things, a sensation of heaviness, swelling of the eyes, itching, slimy secretions, and coldness of the eyes. In blood-born ophthalmia the symptoms of the bile-born variety manifest themselves. If ophthalmia gradually gains in intensity, it develops into 'Adhimantha.' Besides the symptoms already mentioned, hemicrania manifests itself and intense pain also in half the eye. The patient feels as if this portion of the eye is about to be torn out. If the eye becomes inflamed and swollen, and red like a ripe fruit of *Ficus glomerata*, accompanied by itching and slimy discharges, and if suppuration takes place, the disease is called 'Akshipāka' or suppuration of the globe. If the bile be excited in consequence of excessive indulgence in food and drink that are sour, a disease arises, called 'Amlādhyushita' or Iritis. The region of the pupil becomes slightly blue and the surrounding extremities become red. Swelling and burning also take place, and suppuration follows.

In consequence of continued fasts, or sparing diet, or eating such articles as are of keen
 Night-blindness. virtues, or exposure to the heat of fire
 or the sun, or of looking at blazing objects, or excessive toil, or night-keeping, or excessive indulgence in sexual pleasure, or discharge of semen by improper ways, excessive thought and anxiety, out-bursts of wrath or grief, or waste of *dhatu*s due to continued suffering from gonorrhœa and

other diseases of the kind, the power of vision becomes weakened. The result is that objects at a distance, or those that are minute, become unperceivable, or the patient fails to see anything at night. The incapacity to see anything at night is known by the name of Night-blindness.

By applying to the eye the exudation of the new leaves of *Nerium odorum*, or by applying galena rubbed with the decoction of *Berberis Asiatica* or human milk, the pains, burning, and flow of tears in ophthalmia may be promptly checked. For alleviating swelling, plasters should be applied around the eye (on the outside) of 'Saindhava' salt, *Berberis Asiatica*, red ochre, chebulic myrobalans, and galena pounded together. By gently applying also the lotion made of red ochre, red sandal paste, dry ginger, white chalk, and *Acorus Calamus*, with cold water, blood-horn ophthalmia may be alleviated.

For curing redness of the eye, water in which alum has been dissolved, or rose water, should be given. Our 'Netrabindu', the best medicine for ophthalmia, is a highly efficacious remedy for all varieties of ophthalmia. For curing swelling of the eye, fomentation should be resorted to, using the boiled fruits of opium as the heating agent. In 'Akshipáka' or suppuration of the globe, and 'Adhimantha' or severe ophthalmia, these medicines may be applied. If pain in the head accompanies, the remedies mentioned for curing headaches, as also 'Mahádagamula' and other oils should be used.

When any disease of the eye reaches a state of maturity, that is, when the swelling and pains and discharge of watery and other secretions abate, collyria should be

Treatment of other diseases of the eye.

applied. Turmeric, *Berberis Asiatica*, liquorice *Vitis, vinifera*, and *Cedrus deodara*, should be grinded together, with goat's milk. The paste thus formed makes a good collyrium. Discharges from the eye may be promptly checked, by applying the decoction of *Acacia Arabica*, thickened by boiling it for sometime, and mixed with honey. The expressed juice of the leaves of *Egle Marmelos*, half a tola, 'Saindhava' salt, 2 ratis, ghee of cow's milk, 4 ratis, should be mixed and grinded together in a copper vessel, using a cowrie as the pestle. The paste should then be heated on a fire made of cowdung. Mixing it then with human milk, it should be used as a collyrium. This medicine alleviates swelling, discharges of blood, pains, and ophthalmia. By applying the 'vartis' or sticks called 'Chandrodaya,' 'Vrihat-chandrodaya,' and 'Chandraprabhá,' and the collyrium, 'Nágárjjunánjana,' various kinds of eye-diseases are alleviated. The 'Páchanas' called 'Vibhitakyádi,' 'Vásakádi,' and 'Vrihat-vásádi,' as also 'Mahátriphaládyaghrita' and 'Nayanchandra-lauha,' and similar other medicines, should with discretion be prescribed in all diseases of the eye. The patient derives great benefit from taking every day the pulv of the three myrobalans.

When the power of vision is weakened, 'Mahátriphaládyaghrita,' 'Açwagandhá-ghrita,' 'Vri-

Our 'Keshranjan-oil,' an efficacious remedy in strengthening the power of vision.

hat-cchágáládyaghrita, 'Makaradhwa,' 'Vishnu-taila,' 'Náráyana-taila,' our 'Keshrajan-taila,' and other ghees and

oils that promote nutrition and are alleviative of the wind, should be prescribed. For curing Night-blindness, these medicines are efficacious. Sticks should be made of galena, turmeric, *Berberis Asiatica*, leaves of *Echites caryophyllata*, and leaves of *Melia Azadirachta*,

with the juice of cowdung. These sticks form a highly beneficial collyrium in Night-blindness. By pouring every evening 3 or 4 drops of the expressed juice of betel leaves* on the eye, much good is derived in this disease. By inserting a firefly in a slice of plantain or a prepared betel, and causing the patient to eat it unknowingly, beneficial results may be expected in this sort of blindness.

In ophthalmia and other diseases of the eye, the food given to the patient should be light, dry, and alleviative of phlegm. If fever accompanies, the patient should observe fasts in due measure. Fish, flesh, sour articles, pot-herbs, *Phaseolus radiatus*, curds, all kinds of heavy food, as also baths, sleep at daytime, reading, sexual indulgence, exposure to the sun or fire, and exposure of the eye to strong light, should be avoided. In weakness of vision and Night-blindness the patient should take nutritive and oily food and such food as is alleviative of the wind. The head of 'Rohita' fish, flesh, ghee, milk, butter, 'pooris,' wheat-flour fried in ghee and boiled with milk and sugar, &c., prove highly beneficial. The use of things that are dry, exposure to influences which dry the system, physical exercises, exposing the eye to strong light, toil, walking long distances, reading, sexual indulgence, and other acts which lead to a waste of the *dhātus*, are very baneful in eye-diseases.

HEAD-ACHES.

Headaches are generally accompanied by severe pains.

Names.

They are of various kinds. In the wind-born variety, the accession of the pain is sudden. It increases in intensity during the night. If the head be wrapped round with a piece of cloth, or oily 'sweda' (or fomentation with oily substances) be applied, relief is brought about. In the bile-born variety, the patient feels that his head is covered with burning coals. Hot vapours seem to issue from the eyes and the nose. By adopting cooling operations, as also when night comes, the pain abates. In the phlegm-born variety, the patient feels his head to become heavy and full of phlegmonous matter. A sense of the head being stupefied, accompanied by pain, is always present. In that variety of the disease which is caused by all the faults becoming excited together, the above symptoms exist in a state of union. In blood-born headaches, the symptoms are observed of the bile-born variety. The pain becomes so intense that the head cannot be touched without afflicting the patient greatly.

If the blood, fat, phlegm, and wind, dwelling in the head, sustain excessive diminution, the result is a head-ache that is characterised by severe pain and that is incurable. Headache born of the loss of 'dhátus.'

In worm-born headache, in consequence of the worms in head, biting, piercing, and throbbing pains are felt, and watery discharges, mixed with pus, occur from the nose.

That variety of the disease in which the patient feels a slight pain in the eyebrows while the sun begins to rise, and in which the Symptoms of 'Suryávarṭa.'

pain increases as the sun ascends towards the meridian, and begins to decrease as the sun begins to descend, disappearing altogether with the setting of the sun, is known by the name of 'Suryávarta.' The intensity of the disease is at its height during midday.

That variety of the disease in which pain is at first felt at the nape of the neck and soon after in the forehead and the brows, and in which the cheeks shiver and lock-jaw and diverse kinds of eye-diseases appear as accompaniments, is called 'Anantaváta.' Sometimes, in consequence of the wind, or the wind and the phlegm, becoming excited owing to eating dry food, or eating anything before the food last taken has been digested, or exposure to east winds or the sun, or sexual indulgence, or suppressing the urgings of stools and urine, or toil and physical exercise, a severe ache, affecting only half of the head, arises. Intense pain afflicts one of the 'Manyás' or principal nerves of the neck, the eye-brow, half the forehead, the ear, and the eye of that side, as also the 'çaukha' or temple (of the side that is afflicted). This variety of headache is called 'Hemicrania.' That disease in which severe pain is felt first in one of the temples, followed by a red swelling with a burning pain, and which is accompanied by severe pain afflicting the entire head and obstruction of the throat with total stoppage of the voice, is called 'çankhaka.' If it is not properly treated, death may ensue within three days.

In wind-born headaches, the drinking of such ghees as are alleviative of the wind, as also rubbing the body with oil, is very beneficial. Plasters should also be applied of *Aplotaxis auriculata* and the roots of *Ricinus Communis* pounded together with 'kánji

or of the flowers of *Pterospermum suberifolium*, pounded with water. In headaches caused by the excited bile, the patient should be purged by administering to him a proper measure of the pulv of *Convolvulus Turpethum* with either ghee or milk. If the patient feels a burning sensation, ghee, washed a hundred times, should be rubbed on the forehead. Plasters may also be applied, made of the flowers of *Nymphaea stellata* or *Nymphaea lotus*. Some other plasters are prescribed for bile-born headaches. They are *Pterocarpus santalinus*, the roots of *Andropogon muricatum*, liquorice, *Sida cordifolia*, 'Vyághranakhi,' and the flowers *Nymphaea stellata*, pounded together with milk, or the fruit of *Phyllanthus Emblica* and the flowers of *Nymphaea stellata* pounded together with water. In headaches caused by the excited phlegm, the patient should use as snuff the pulv of *Myrica sapida*, or warm water with which has been mixed the pulv of *Bassia latifolia*. Plasters made of these, viz., *Piper longum*, dry ginger, the bulbous roots of *Cyperus rotundus*, liquorice, dill seeds, the flowers of *Nymphaea stellata*, and *Aplotaxis auriculata*, pounded together with water, prove very efficacious in phlegm-born headaches. In headaches caused by the excited wind and bile, the patient should snuff the milk in which have been boiled the smaller group of the five roots. In headaches caused by both wind and phlegm, milk should be snuffed in which have been boiled the larger group of the five roots. In headaches caused by the excitement of all the faults, the remedies mentioned above should be combined. By drinking through the nose the decoction of these, viz., the three bitters, *Aplotaxis auriculata*, turmeric *Tinospora cordifolia*, and *Physalis flexuosa*, or by snuffing the following preparation, viz., the pulv of dry ginger, 3 mashas, mixed with milk of the measure of 3 tolas, headaches born

of all the three faults are alleviated. Blood-born headaches should be treated like those that are due to excited 'bile. In headaches due to waste of the 'dhátus,' the patient should take, 'Amritaprāṣa-ghrita,' 'Vrihatechágáládya-ghrita,' and other medicines that promote nutrition. All those plasters, again, that are applicable to wind-born headaches should be applied in this variety of the disease. In worm-born headaches, the patient should snuff 'Apámarga-oils,' as also dry ginger, *Piper longum*, pepper, the seeds of *Galedupa Indica*, and the seeds of *Moringa pterygosperma* reduced to a paste with cow's urine. Other medicines should also be used that are regarded as destructive of worms.

In Hemicrania and the diseases called 'Suryávarta' and 'Anantaváta,' plasters should be applied of *Asclepias pseudo-sarsa*, *Nymphæa stellata*, *Aplotaxis auriculata*, and liquorice, pounded together with 'kánji.' Another plaster that is efficacious consists of the seeds, pounded with the expressed juice, of *Cleome pentaphylla*. The patient should also snuff, the juice of *Verbesina calandulacea*, and goat's milk, mixed in equal measures and exposed to the heat of the sun. It should be snuffed while still warm. Hemicrania is alleviated by the patient's snuffing any of these, viz., milk mixed with sugar, the water of cocoanuts, cold water, or ghee. The other remedies, to be used as snuff, in Hemicrania, are *Embellia Ribes* and black sesame, taken in equal measures, and pounded together; or burnt earth reduced to powder, and the pulv of pepper, mixed in equal proportions. In that variety of headache which is called 'çankhaka', the remedies mentioned above prove beneficial. Plasters should also be applied on the temple, made of *Berberis Asiatica*, turmeric, *Rubia cordifolia*, the leaves of *Melia Azadirachta*, the roots of *Andropogon muricatum*, and 'Padmakáshtha,' pounded

together with water. By drinking ghee through the nose as also by sprinkling on the head water or goat's milk, relief may be obtained in that variety of headache which is called 'çankhaka.'

The scriptural medicines for headaches are 'çirahçulâdivajra-rasa,' 'Arddhanâdinâtakeçwara,'
 Scriptural medicines. 'Chandrakânta-rasa,' 'Mayurâdya-ghrita' 'Shadavindu-taila,' and 'Vrihatdaçamûla-taila.' These are beneficial in all varieties of the disease. Of course, they should be prescribed with discretion.

With the exception of those varieties which are born of phlegm or worms, or all the three
 Diet and forbidden practices. faults, the wind generally predominates in headache. The regimen prescribed for diseases of the wind should, with discretion, be followed in this disease. In those varieties which are born of the excited phlegm, or in which the phlegm predominates, dry and light food and drink should be taken. The patient should abstain from baths, sleep at daytime, and all food that is heavy and difficult of digestion. In fact, everything should be avoided which excites the phlegm. In the worm-born variety of the disease, the patient should observe all those ordinances in respect of food and drink and practices which have been laid down as beneficial in worm-born diseases.

DISEASES OF WOMEN.

By eating milk and fish and other food consisting of such inharmonious ingredients, by drinking wines, by eating before the food last taken has been digested, by eating things that are unripe or uncooked, in consequence also of abortion, of excessive sexual indulgence, of long and fatiguing walks, of riding constantly on animals or cars and other vehicles, of grief, fasts, bearing of weights, wounds, excessive sleep, and other causes, the disease called 'Pradara' is seen to arise. It is otherwise called 'Asrikdara.' The general symptom of this disease is the discharge of fœtid secretions from the vagina, accompanied by pains and langour of body. That variety of the ailment in which the discharge consists of a slimy and whitish fluid mixed with raw juice and looking like water in which meat has been washed, is regarded as phlegm-born. That in which the discharge is yellow, or blue, or dark, or red in colour, hot, gushing, and accompanied by slight pains, is regarded as bile-born. That in which the discharge looks dry, (or unctuous), and is red in hue, and mixed with froth, resembles water in which meat has been washed, and is accompanied by piercing pains, is regarded as wind-born. In that variety of the disease which is born of all the faults, the discharge that takes place has the colour of honey, or ghee, or yellow orpiment. It resembles the marrow in appearance, and has the smell of a corpse. This variety of the disease is incurable. If a woman afflicted by this disease loses blood and strength, if the discharges be copious and frequent, and if thirst and

fever and other ailments supervene, her condition is regarded as hopeless *

'Vádhaka' or Dismenorrhœa is a form of 'Pradara.' Its varieties are many. In some, pains occur in the waist, below the navel, in the sides, and in the chest. The menstrual flow continues sometimes for a whole month or even two months. In some variety a burning sensation is felt in the eyes, the palms of the hands, and the vagina. Discharges take place of the menstrual blood mixed with slimy secretions. Sometimes the menstrual flow occurs twice a month. In some variety, restlessness of mind, heaviness of body, copious menstrual discharge, burning sensation in the palms and soles, gradual emaciation, and piercing pains below the navel, manifest themselves. The menstrual flow appears sometimes at intervals of three or four months. In some variety the flow appears after still longer intervals. When it does appear, the discharge is scanty. The breasts become heavy and swollen. The body becomes emaciated. Piercing pains are felt in the vagina.

That menstrual flow is said to be pure and healthy which appears every month, which lasts for five days, which is unaccompanied by burning and pains, in which the blood is slimy and its measure neither copious nor scanty, in which the colour of the blood is like that of water in which lac is dissolved, and in which the blood is of such a kind that if it saturates a piece of cloth it disappears immediately without

* 'Pradara' seems to be a general name for Leucorrhœa, Menorrhagia, and Dismenorrhœa. That which is regarded as its phlegm-born variety corresponds with Leucorrhœa. When the discharge is copious and consists of blood, it is called Menorrhagia. If the discharge of blood be scanty and irregular, it corresponds with Dismenorrhœa.

leaving a stain on it when the cloth is washed in water. If any deviation be observed from these symptoms, it should be noted as a sign of morbidness.

In consequence of improper food and exercises, of vitiated menstrual flow, of fault of the injected semen, and other causes of a similar kind, the genital organs of women become subject to many diseases. That in which menstrual blood, mixed with froth, is discharged with great pain, is called 'Udávarta.' That disease in which, owing to the morbid character of the menstrual flow, the capacity of conceiving becomes lost, is called 'Vandhyá' or sterility. In the disease called 'Viplutá', there is constant pain in the vaginal canal. In the disease called 'Pariplutá', the woman feels great pain at the time of sexual congress. All these four diseases are wind-born. The vaginal canal becomes rough and hard, and severe pain also is felt. In the disease called 'Lohitaksháya,' loss of blood takes place, accompanied by a burning sensation in the organ. In that disease of the genital organs which is called 'Vámini,' a secretion that looks like semen is discharged, mixed with menstrual blood, and accompanied by wind. In that disease which is called 'Prasrangsini,' the uterus and the vagina fall away, in a downward direction, from their natural position, and various morbid symptoms, due to excited wind, manifest themselves. If the woman conceives, delivery becomes very difficult. In the disease called 'Putraghni' or habitual abortion, conception takes place now and then, but in consequence of the loss of blood through the excited wind, abortion occurs. In these four diseases, which are born of excited bile, a burning sensation, inflammation, and fever manifest themselves. In the disease called 'Atyánandá,' even excessive

Diseases of the genital
organs

sexual congress does not gratify the woman. If in consequence of the vitiated phlegm and blood, a fleshy tumour like a ball or knot is generated within the uterus, the disease is called 'Karnika.' If at the time of sexual congress the secretion of the fluid juice takes place of the woman before the seminal discharge of the man, the woman becomes unable to take the seed and, therefore, becomes sterile. This disease is called 'Acharaná.' If in consequence of excessive indulgence in sexual pleasure, a woman loses the capacity of receiving the seed, the disease is known by the name of 'Aticharaná.' In these four phlegm-born diseases the organ becomes slimy, itching, and exceedingly cold to the touch. That woman who never menstruates, whose breasts show a partial development, whose organ becomes rough to the touch, is said to be endued with an organ that is called 'shandi' or sterile. If a woman, who is not of full age and whose organ is narrow, unites in sexual congress with a man of fully developed organ, the result is a swelling of the vulva. The swollen vulva hang down like the scrotum. This disease is called 'Andali.' That organ which is exceedingly large and wide is called 'Maháyoni'; while that which is small and narrow is called 'Suchivaktrá' or needle-mouthed.

In consequence of sleep at daytime, excessive wrath, excessive physical exercises, excessive sexual indulgence, or sores in the vaginal canal from wounds or other causes, the three faults become excited and cause a fleshy excrescence in the mouth of the vaginal canal, whose colour is like that of blood mixed with pus, and whose shape is like that of a fruit of *Artocarpus Lakoocha*. If the wind predominates, this fleshy excrescence becomes dry, discoloured, and full of cracks. If the bile predominates,

Symptoms of 'yon-ikanda.'

the excrescence becomes bloody in hue and is accompanied by burning and fever. If there is predominance of the phlegm, it becomes blue in colour and is accompanied by itching. If all the three faults be excited together, the result is that the above symptoms manifest themselves in a state of union.

In wind-born 'Pradara,' the following medicine proves very efficacious : curds, 6 tolas, 'Sanchála' salt, 2 annas, *Nigella sativa*, liquorice, and *Nymphæa stellata*, each of the weight of 4 annas, and honey, half a tola, should be mixed together. The total 2 tolas, should be administered to the patient every two hours. In the bile-born variety of the disease, 'the juice of *Justicia Adhatoda* or of *Tinospora cordifolia*, mixed with sugar, should be given. In blood-born 'Pradara,' galena, the roots of *Amaranthus polygamus*, and honey, in equal measures, should be pounded together and administered with water in which 'átapa' rice has been washed. If with this variety of the disease there is asthma, the above medicine, with two additional ingredients, viz., *Siphonanthus Indica*, and dry ginger, should be given. The juice of the fruit of *Ficus glomerata*, and water in which lac has been soaked, both check the discharge of blood. The bark of *Saraca Indica*, of the weight of 2 tolas, should be boiled in half a seer of water, till a quarter of a seer remains. This should again be boiled with 1 seer of milk, till only a seer remains. This milk should be given to the patient according to the strength of her digestion. It alleviates blood-born 'Pradara' promptly. The decoction called 'Dárbbyádi,' the paste called 'Utpaládi,' the pulp called 'Chandanádi,' 'Pushyánuga-churna' 'Pradarári-lauha,' 'Pradarántaka-lauha,' 'Açoka-ghrita,' 'Sitakalyána-ghrita,' and our 'Açokárishta,' are the scriptural medicines that may with discretion be administered in all

varieties of 'Pradara.' If indigestion, loss of appetite, and fever supervene, the ghees should be prescribed. If the wind be excited, or if pain be felt in the abdomen, then 'Priyngwádi-taila' or 'Prameha-taila' should be rubbed on the body. Both these oils give prompt relief.

In the disease called 'Vádhaka' (dysmenorrhœa) if the menstrual flow be copious, then the medicines prescribable in 'Pradara' may be used with discretion. If the menstrual flow be stopped, the patient should be given the flowers of *Hebiscus Rosa-sinensis* pounded with 'kánji.' Another efficacious remedy consists of these : aloes, sulphate of iron, opium, and *Cinnamomum Zeylanicum*, each reduced to powder and of the weight of 4 annas, pounded together with water. Pills of the weight of 2 ratis should be made of the paste thus made. Two of these pills should be given, with water, every day. The seeds of bitter gourds, the roots of *Croton polyandrum*, *Piper longum*, treacle, the fruit of *Randia dumetorum*, liquorice, the seeds of the garden radish, and the exudation of *Euphorbia neriifolia*, should be pounded together into a paste. Sticks should then be formed of this paste. These sticks, if held by the patient within the vaginal canal, induce the menstrual flow. For alleviating the pains in the abdomen and other places, plasters should be applied of bran. The use of our 'Açoká-rishta' removes all complaints connected with 'Vádhaka' or dysmenorrhœa, and induces conception. The scriptural medicines prescribable are 'Açoka-ghrita,' 'Phalakalyána-ghrita,' and 'Sitakalyána-ghrita.'

In those diseases of the genital organs in which the wind predominates, the administration of such ghees as are alleviative of the wind, is beneficial. The genital organ should

Treatment of the diseases
of the genital organs.

be washed with the decoction of *Tinospora cordifolia*, the three myrobalans, and *Croton polyandrum*. Another medicine consists of these: *Tabernaemontana coronaria*, *Solanum melongena*, *Aplotaxis auriculata*, 'Saindhava' salt, and *Cedrus deodara* should be grinded into a paste. Boil the paste in mustard oil in the usual way. Take a small quantity of cotton. Drench it in the oil thus cooked. The patient derives much benefit by holding the drenched cotton in the vaginal canal. In those diseases of the genital organs which are characterised by a predominance of the bile, the treatment should have for its object the alleviation of the excited bile. The insertion into the vaginal canal of cotton drenched in ghee is necessary. In those diseases of the genital organs in which the phlegm predominates, such medicines should be applied as are of drying and heating virtues. Another remedy consists of the insertion of sticks, of the length of the second finger, made of the paste of *Piper longum*, pepper, the seeds of *Phaseolus Roxburghii*, dill seeds, *Aplotaxis auriculata*, and 'Saindhava' salt. In the disease called 'Karnini', sticks should be inserted, made of the paste of *Aplotaxis auriculata*, *Piper longum*, the sprouts of *Calotropis gigantea*, and 'Saindhava' salt, pounded with the urine of the goat. Cracks in the genital organ may be cured by applying plasters made of dill seeds and the leaves of *Zizyphus jujuba*, pounded together and then mixed with sesame oil. By applying plasters made of the pounded roots of *Momordica charantia*, the genital organ, if it has sunk, may be made to resume its position. In the disease called 'Prasrangsini', the organ may be made to resume its position by rubbing it with the fat of mice and rats. If the organ becomes lax, its tightness may be restored by applying plasters made of *Acorus calamus*, *Nymphaea stellata*, *Aplotaxis auriculata*,

pepper, *Physalis flexuosa*, and turmeric, taken in equal measures and pounded together. By inserting also within the genital organ, musk, nutmegs and camphor, or the fruit of *Randia dumetorum* and camphor, pounded together into a paste and mixed with honey, the same result may be expected. For preventing the foetid smell of the organ, the following is an efficacious remedy : take some new leaves of *Mangifera Indica*, *Eugenia jambolana*, *Fernia elephantia*, *Citrus medica*, and *Ægle Marmelos* ; also liquorice and the flowers of *Echites Caryophyllata* : pound them into a paste, and cook it in ghee. Soaking a quantity of pure cotton in the ghee thus made, it shou'd be inserted into the organ. For curing sterility, the woman should drink, after her bath on the expiry of the menstrual period, milk, cooked with the decoction of *Physalis flexuosa*, with a little ghee in it. Two other remedies for the prevention of sterility are : 1. the roots of *Barleria cristata*, the flowers of *Grislea tomentosa*, the buds of *Ficus Indica*, and *Nymphaea stellata*, pounded together with milk ; and 2. *Sida cordifolia* (of the white variety), sugar, liquorice, *Sida cordifolia* (of the red variety), the buds of *Ficus Indicus*, and *Mesua ferrea*, pounded together with honey and then mixed with milk and ghee. For curing the disease called 'Kanda', the organ should be washed with the decoction of the three myrobalans mixed with honey. Plasters should also be applied to the fleshy growth, made of red ochre, mango-buds, *Embelia ribes*, turmeric, galena, and *Myrica sapida*, reduced to powder and mixed with honey. Another remedy consists of the insertion into the organ of a piece of cloth that has been drenched with oil in which has been cooked the flesh of the rat. The method of preparation is this : take the fresh meat of rats. Dividing it into small pieces, these should be 'boiled in mustard oil. When

the flesh has been so boiled as to become dissolved in the oil, the cooking should be regarded as complete. The scriptural medicines, that are prescribable with discretion in all diseases of the genital organ, are 'Phala-ghrita', 'Phalakalyāna-ghrita', 'Kumārakalpadruma-ghrita', and other ghees of the kind.

In 'Pradara' or gonorrhœa, and other diseases of a similar kind, the patient should take at day-time boiled rice of the finer varieties. Diet and forbidden practices.

Among pulses, *Phaseolus Mungo*, *Cicer lens*, and gram or chick-pea, are proper. Plantain-flowers, the variety of plantains called 'Kāñchkalā', *Memordica charantia* (of both varieties), the fruit of *Ficus glomerata* (of the smaller variety), that of *Trichosanthes dioica*, old fruit of *Cucurbita pepo*, and other vegetables of a similar kind, cooked with ghee (and not mustard oil), may be taken. If the patient can digest it, she may now and then take a little of meat-juice, using goat's flesh in preparing it. The soup of little fishes may be taken without injury. The evening meals may consist of 'chapatis' if the patient can digest such food. The patient may also bathe in tepid water at intervals of 3 or 4 days according as she may be able to bear. If fever supervenes, the lightest diet should be taken, and baths should be abstained from. All food that is difficult of digestion, also food that generates phlegm, fish, sweet-meat, such pungent things as chillies, too much salt or milk, exposure to the heat of fire or the sun, or to cold, sleep at daytime, night-keeping, excessive toil, fatiguing walks, drinking, ascending to and descending from high places, sexual indulgence, suppression of stools and urine, and singing or speaking in loud tones, should be abstained from in all diseases of women.

If the menses be stopped, cooling operations should be resorted to. *Phaseolus radiatus*, sesame, curds, 'kánji', fish, and meat, prove beneficial.

TREATMENT OF PREGNANT WOMEN.

During pregnancy, women become subject to various diseases such as fever, dropsical swellings, dysentery, nausea, and vomiting, swimming of the head, discharge of blood from the uterus, uterine pains, &c. These diseases cannot be treated, without danger, by applying the ordinary remedies laid down for them. The fact is, during pregnancy, the greatest care ought to be taken of both the mother and the child in the womb. Hence, it is necessary for the physician to be acquainted with the especial methods of treating at least the principal diseases of women in a state of pregnancy.

For treating fever during pregnancy, the decoction should be given of liquorice, *Pterocarpus santalinus*, the roots of *Andropogon muricatum*, *Asclepias pseudosarsa*, *Symplocos racemosus*, and dried grapes, mixed with honey and sugar. The decoction of only these four, viz., *Pterocarpus santalinus*, *Symplocos racemosus*, and dried grapes, mixed only with sugar, also proves beneficial. A few other medicines for treating the fever of pregnant women are the decoction known as 'Erāṇḍādi', 'Garbha-chintāmani-rasa', 'Garbhavilāsa-rasa', and 'Garbhapiyushavalli-rasa'. Among, again, those 'Páchanas' and medicines which have been men-

tioned in the chapter on fever, those which are of mild energy may be prescribed with discretion. If diarrhœa, or chronic lenteric dysentery, sets in, the patient should be given the decoction of the bark of the mango, and that of the *Eugenia Jambolana*, mixed with the pulv of fried paddy. The other remedies prescribable in these diseases are the decoction called 'Vrihat-hriverádi,' the pulv called 'Lavangádi,' and 'Indraçekhara-rasa'. Among also all the medicines which have been mentioned in the chapter on diarrhœa, those which are of mild energy may be given with discretion. If the bowels be constipated, the patient should take mangoes, ripe fruit of *Egle Marmelos*, dried grapes, ripe fruit of *Carica papaya*, and warm milk, owing to the laxative properties that these are regarded to possess. If absolutely necessary, a 'kánchá' of castor-oil may be administered with warm milk. Severe purging endangers the fœtus in the womb. Hence, the greatest caution is needed in administering purgatives. If dropsical swellings appear on the dorsa, the decoction, mixed with sugar, should be given to the patient, of these, *viz.*, dried radishes, *Boerhavia diffusa*, the seeds of *Tribulus lanuginosus*, the seeds of *Cucumis utilisissimus*, and the seeds of *Cucumis sativus*. The part swollen should also be rubbed with the expressed juice of the leaves of *Euphorbia nerifolia*. During pregnancy there is always a tendency to vomit. If the woman vomits, medicine should not be given to check it, without the exercise of great judgment. If a little sherbet of sugarcandy, or a little milk, be given to the woman every morning, the natural tendency to vomit may be partially checked. If painful vomiting continues for sometime the following remedy proves efficacious, *viz.*, water in which the pulv of fried paddy, dried grapes, and sugar, have been dissolved by constant by squeezing. This water should be

strained through a piece of clean cloth; a little of it should be given at a time. Another remedy consists of this : dried grapes, the paste of white sandal wood, the seeds of *Cucumis sativus*, the seeds of *Elettaria cardamomum*, and fennel seeds, dissolved in water by continued squeezing. The water should, of course, be strained and a little of it should be given at a time. Besides these, 'Garbhavilāsa-taila,' and the following and other oils mentioned in the chapter on the diseases of the Nervous system, viz, 'Vishnutaila,' 'Madhyamanārāyana-taila,' and 'Nārāyana-taila,' should be used for rubbing. If swimming of the head appears, these oils, as also our own 'Keçaranjana-taila,' and 'Murchchāntaka-taila' should be applied on the head.

If discharge of blood occurs from the uterus during the first month of pregnancy, milk should be given in which have been boiled liquorice, the seeds of some pot-herb, the bulbous root-stock called 'Kshirakākoli,' and the bark of *Cedrus deodra*. If the discharge occurs in the second month, milk should be given in which have been boiled *Ovalis corniculata*, sesame (of the black variety), *Rubia cordifolia*, and *Asparagus racemosus*. For discharge in the third month, the medicine is milk in which have been boiled the common parasitical plant, Kshirakākoli, *Nymphaea stellata*, and *Asclepias pseudosarsa*. For discharge in the fourth month, the ingredients to be boiled in milk are *Asclepias pseudosarsa*, *Echites frutescens*, *Cymbidium tessaloides*, *Siphonanthus Indica*, and liquorice. Milk boiled with *Solanum Indicum*, *Solanum Xanthocarpum*, the fruit of *Gmelina arborea*, the barks and buds of *Ficus Indicus*, *Ficus religiosa*, *Ficus infectoria*, *Ficus glomerata*, and other trees of the same genus which yield a milky juice, and ghee,

Treatment of the discharge of blood from the uterus.

checks discharges occurring in the fifth month. If discharges occur in the sixth month, the milk to be given should be boiled with *Cassia Tora*, *Sida cordifolia*, the seeds of *Moringa pterygosperma*, *Tribulus lanuginosus*, and liquorice. Milk boiled with the fruits of *Trapa bispinosa*, lotus stalks, dried grapes, the bulbous root-stock of *Scirpus Kysoor*, liquorice, and sugar, is the remedy for discharges occurring in the seventh month. If discharges occur in the eighth month, milk boiled with *Feronia elephantia*, *Agle Marmelos* *Solanum Indicum*, the leaves of *Trichosanthes dioica*, the roots of *Saccharum officinarum*, and *Solanum Xanthocarpum*, should be given. For discharges occurring in the ninth month, the milk to be given should be boiled with liquorice, *Asclepias pseudosarsa*, *Kshirakakoli*, and *Echites frutescens*. If discharges occur in the tenth month, milk boiled with only dry ginger should be given.

If pains resembling those of labour appear during the first month of pregnancy, the paste of white sandal wood, dill seeds, sugar, and the fruit of *Randia dumetorum*, in equal measures, pounded, and dissolved in water in which 'átapa' rice has been washed, should be given. Another remedy consists of this : sesame, 'Padmakásthā,' *Nymphaea lotus*, and 'çáli' rice, should be pounded together with milk ; the paste should then be dissolved in milk, and sugar and honey should be added to it. The diet should consist of milk and rice. If pains appear during the second month, *Nelumbium speciosum*, the fruit of *Trapa bispinosa*, and the bulbous root-stock of *Scirpus Kysoor*, pounded together and dissolved in water in which 'átapa' rice has been washed, should be given. For pains during the third month, the remedy is this : take two parts of *Asparagus racemosus*, and

Treatment of pains during pregnancy.

of the fruit of *Phyllanthus Emblica*, one part ; these should be pounded together and dissolved in warm water. Another medicine consists of the flowers of *Nelumbium speciosum*, the flowers *Nymphaea stellata*, and *Nymphaea lotus*, pounded together and dissolved in sherbet of sugar. If pains appear in the fourth month, the remedy consists of either 1. the flowers of *Nymphaea stellata*, *Nymphaea lotus*, *Solanum Xanthocarpum*, and *Tribulus lanuginosus*, or 2. *Tribulus lanuginosus*, *Solanum Xanthocarpum*, *Sida cordifolia*, and the flowers of *Nymphaea stellata*, pounded together and dissolved in milk. For pains in the fifth month, the remedy is the flowers of *Nymphaea stellata*, and Kshirakakoli, pounded together with milk, and administered with milk, ghee, and honey ; or the flowers of *Nymphaea stellata*, *Aloe perfoliata*, and Kakoli, taken in equal measures, pounded together in water, and administered with milk. For pains that appear in the sixth month, the seeds of *Citrus medica*, *Aglaia Roxburghiana*, red sandal wood, and the flowers of *Nymphaea stellata*, pounded together with milk, or the seeds of *Buchanania latifolia*, grapes and the pulv of fried paddy, pounded together with cold water, should be administered. When pains appear in the seventh month, the remedy to be used is *Asparagus racemosus*, and the root-stock of the lotus, pounded together with milk, or the fruit of *Feronia elephantia*, the roots of the betel nut, fried paddy, and sugar, pounded together with cold water. For treating pains appearing in the eighth month, the drugs mentioned for the pains of the seventh month should be used, pounding them with water in which 'átapa' rice has been washed. For pains appearing in the ninth month, the roots of *Ricinus communis*, pounded with 'kánji,' should be administered. If pains appear in the tenth month, the

remedy to be used is the flowers of *Nymphaea stellata*, liquorice, and the seeds of *Phaseolus Mungo*, pounded together with sherbet of sugar or with milk. When pains appear in the eleventh month, liquorice, Padmakáshtha, lotus-stalks, and the flowers of *Nymphaea stellata*, or Kshirakákoli, the flowers of *Nymphaea stellata*, *Aplotaxis auriculata*, *Mimosa pudica*, and sugar, pounded with cold water and dissolved in milk, should be administered. If the pains manifest themselves in the twelfth month, the remedy is sugar, *Batatas paniculatus*, Kákoli, and Kshirakákoli pounded together with cold water. The time of delivery is from the ninth to the twelfth month. Hence, if páñs appear during those months, the physician should carefully ascertain whether they are true labour pains or not. If they are ascertained to be true labour pains, no medicine should be administered.

If labour pains set in prematurely, the woman should take the following drink ; half a tola of prepared mud, dissolved in a quarter of a seer of goat's milk and mixed with 4 annas weight of sugar. Another remedy consists of the decoction of *Pavonia odorata*, *Aconitum heterophyllum*, the bulbous root-stock of *Cyperus rotundus*, the exudation of *Bombax malabaricum*, and the seeds of *Holarrhena antidysenterica*. This decoction relieves the pains, called 'çula', of the abdomen also. After abortion has taken place, milk should be given in which have been boiled the bulbous roots of *Scirpus Kysoor*, the fruit of *Trapa bispinosa*, the filaments of the lotus, the flowers of *Nymphaea stellata*, *Phaseolus trilobus*, and liquorice. This medicine relieves the pains caused by discharges of matter from the uterus after abortion.

Premature delivery, abdominal pains, &c.

If copious discharges of blood occur after abortion or premature delivery, or even delivery at the proper time, such discharges should be checked, for if unchecked, they may bring about death. One of the methods for checking the flow of blood is to gently knead the abdomen of the patient at short intervals. Cold water should be sprinkled upon the abdomen. The abdomen should also be gently struck with a napkin drenched in cold water. Another remedy consists of this ; take a quantity of 'Nisádala' as also of saltpetre ; wet them in water and bind them in a piece of cloth. This cloth should be placed on the abdomen. The uterus should also be washed with cold water, using a syringe. Two rats of the dried dung of the pigeon, reduced to pulv and dissolved in water in which 'átapa' rice has been washed, should be administered as a drink. The patient should be kept still, without being allowed to move, or stand up. If she feels thirsty, she may have as much cold water to drink as she may desire.

If the labour be protracted, the roots of *Gloriosa superba*, Treatment of delay in delivery. should be applied on the soles of the feet. The roots of *Justicia Adhatoda* should be tied to the waist, or plasters made of those roots reduced to a paste should be applied on the navel, the rectum, and the mouth of the uterine canal. The other medicines that induce prompt delivery are 1. soot pounded with 'kânji' ; 2. the roots of *Citrus medica*, (variety, *-acida*), and liquorice, pounded together with ghee ; and 3. the fruit of *Grewia Asiatica*, *Hedysarum gangeticum*, *Cissampelos bernandifolia*, and the roots of either *Gloriosa superba* or *Achyranthes aspera*, the roots of *Artemisia vulgaris*, and

the roots of *Plumbago Zeylanica*, taken in equal measures and pounded together. The dose of each of these medicines should be 4 annas.

If the child in the womb be not alive, delivery seldom takes place of itself. In many cases the use of instruments becomes necessary.

If a little quantity of the exudation of *Euphorbia nerifolia* be placed upon the head of the woman, delivery takes place without further trouble. Plasters applied on the navel, made of the fruit of *Piper longum* and *Acorus Calamus*, pounded together with water, and then mixed with castor oil, prove efficacious. Another medicine for internal administration consists of the roots of *Artemisia vulgaris* and the roots of *Plumbago Zeylanica*, taken in equal measures and pounded together in water. The dose should be 4 annas.

If the placenta does not come out in proper time, the smoke should be applied into the vagina of dried sticks made of bitter gourds, the slough of a snake, *Luffa amara*, mustard seeds, and mustard oil, pounded together into a paste. One should, tying some hair round one's finger, insert it into the throat of the woman and scratch it gently. The fact is, the woman will feel an urging to vomit. This helps the expulsion of the placenta. Plasters should be applied on the soles of the feet, made of the roots of *Gloriosa superba*, pounded into a paste. These simple methods quickly cause the expulsion of the placenta.

After delivery the woman sometimes feels severe pains in the abdomen and the head. These are known by the name of 'Makkanda-çula.' By administering the ashes of incinerrated barley spikes dissolved in warm

Treatment of 'çula' pains in the head, &c., after delivery.

water or ghee, these pains may be alleviated. Another remedy consists of the decoction, mixed with 'Saindhava' salt, of these drugs, viz., the fruit of *Piper longum*, the roots of the same, *Piper Chaba*, the roots of *Plumbago Zeylanica*, cardamoms, *Ptychotis Ajowan*, the roots of *Holarrhena antidysenterica*, *Cissampelos hernandifolia*, cumin seeds, mustard seeds, the fruit of *Melia Azedarach*, assafœdita, *Siphonanthus Indica*, *Sansaviera Zeylanica*, *Aconitum heterophyllum*, *Acorus Calamus*, *Embelia Ribes*, and *Picrorrhiza Kurroa*. This promptly alleviates the kind of pains called 'Makkanda-gûla.'

If during pregnancy the wind be excited, the result is that the body of the woman begins to dry up. The fœtus also dries up. Means of alleviating the excited wind. The remedy in such cases is milk boiled with liquorice and the fruit of *Gmelina arborea*. Another medicine that does good is ghee boiled with *Tinospora cordifolia*, *Batatas Paniculata*, *Physalis flexuosa*, *Asclepias pseudosarsa*, *Asparagus racemosus*, *Phaseolus trilobus*, *Glycine debilis*, *Cælogyne ovalis*, and liquorice.

During pregnancy every woman should observe certain general rules of conduct for the benefit of both herself and the child in her womb. The diet should be easy of digestion, nutritive, and capable of creating relish. She should not undergo much labour; nor should she totally abstain from all labour. She should avoid all acts in doing which the breath has to be stopped for sufficiently long intervals, or which require straining. All acts, again, which cause pressure on the womb should be abstained from. Walking long distances, and journeys by quickly-moving vehicles, are baneful. She should always remain cheerful. The

Diet and forbidden practices.

general rules of conduct for the benefit of both herself and the child in her womb.

fact is, if fear, or grief, or anxiety moves her, the consequences on the child in the womb become baneful. Fasts, night-keeping, sleep at daytime, the heat of fire or the sun, sexual congress, the bearing of heavy loads, lying down on hard beds, ascending dizzy heights, and suppression of the urgings of stools and urine, are productive of evil effects.

When diseases appear during pregnancy, the regimen should be the same that is laid down in the chapters treating of those diseases. If ailments, for which fasts have been prescribed, afflict a woman during pregnancy, she should not be made to fast, but light diet should be given to her. If through the excited wind, the woman and the child begin to dry up, she should be given ghee and milk and eggs of geese, the flesh of goats and fowl, and other nutritive food.

After delivery the woman should be kept for some days with great care. For the first three days after delivery, she should be given only milk, or milk and sago. Milk and rice may be given on the second and the third day. After the third day she should take food that is easily digestible and that is, at the same time, nutritive. Up to the fifth day the woman should not be allowed to sit up or walk about. She should not bathe till at least the seventh day is passed. For fifteen or sixteen days commencing from the eighth day, she should bathe in tepid water. Exposure to the heat of fire, as also the administration of dry ginger, pepper, ginger, *Nigella sativa*, and other articles that are of a pungent taste, pounded together with water, does much good. After delivery the dress and bedding of the woman should often be changed. Indeed, she should always wear clean clothes.

DISEASES AFTER DELIVERY.

After delivery diverse diseases afflict a woman in consequence of improper diet and conduct, such as exposure to wind and cold,

Causes.

recourse to cooling operations, eating things that are raw, eating before the food last taken has been digested, and eating food that is heavy and difficult of digestion at a time when the digestive power has been weakened. An ill-ventilated and dark and damp lying-in room is also a potent cause of such diseases. Fever, dropsical swellings, loss of appetite, diarrhœa, lenteric dysentery, deep-seated pains in the abdomen, Epistaxis or suppression of urine, loss of strength, consumption, excessive thirst, heaviness of the body, pains all over the body, secretion of phlegmonous matter from the mouth and the nose, and similar other ailments, which afflict a woman after delivery, are all included under the name 'Sutiká' diseases.

For protecting women from diseases after delivery, care should be taken in constructing the

The construction of the lying-in room a part of treatment.

lying-in room. It is not proper to hastily construct a small room on the yard of a house, with equipments that create disgust. In consequence of sufficient air and light not being admitted into such a room, its atmosphere becomes tainted. Owing, again, to the presence of smoke from the fire maintained within it, the foetid smell of the child's stools and urine and the mother's secretions, as also the presence of two or three other women who are

its constant inmates, the atmosphere is made worse. Such a state of things cannot but cause various diseases to both the mother and the child. The lying-in room should be built on a piece of land that is clean. It should be at least ten to twelve feet long, seven to nine feet broad, and seven to nine feet high. The principal entrance should be either towards the north or the south. There should, at least, be two windows placed in such a position as to freely allow the passage of air. The floor should be higher than the level of the land on which the room is built. It should be metalled with either burnt bricks or dry earth. The fact is, the floor should be protected from dampness by the usual contrivances. Further, the floor should be made smooth and level. Solid planks of wood should be used for the doors and windows. If a new room cannot be constructed, the best room in the house should be selected for making it the lying-in room. The fire to be kept in it should be of charcoal. No smoke should be allowed to rise from it. The fire should be kept in an iron or earthen pan. The bed should be spread on a charpoy. If no charpoy be available, it should then be spread upon some clean straw. The stools and urine of the infant should be promptly removed from the room. The doors and windows should remain shut at night-time or when cold winds blow. At other times, they should be kept open to allow free ventilation. If these instructions be observed, the danger may be minimised of the mother contracting the diseases of the lying-in room.

When the mother catches fever after delivery, the remedies to be applied are the 'páchana' called 'Sutiká-daçumula,' or 'Sahachar-ádi,' also 'Sutikár-rasa,' and 'Vrihat-

Treatment of fever after
delivery.

sutikávinoda.' Another remedy is 'Vishamajwarántakalauha' prepared according to the method called 'putapáka' and mentioned in the chapter on Fevers. A few others mentioned in that chapter may also be prescribed, with discretion. For alleviating the pains of the body, the 'páchana' called 'Daçamula,' as also 'Laksmi-vilása' and a few other remedies of similar virtues, should be administered. For curing cough and bronchitis, 'Sutikántaka-rasa,' and some of the medicines mentioned in the chapter on Bronchitis, are prescribable, such as 'çringárábhra' and the rest. For treating diarrhoea and lenteric dysentery, the medicines mentioned in the chapters on those diseases, as also 'Jirakádi-modaka,' 'Jirakádyarishta,' 'Saubhágysunthi-modaka,' &c., should be prescribed. Generally speaking, in treating the diseases which afflict women after delivery, the physician should seek to alleviate those which predominate over the others, by prescribing with discretion, the medicines laid down for them.

Generally speaking, in diseases of the lying-in room some maladies predominate over others.

Diet and forbidden practices.

The patient should observe the instructions in respect of diet and practices which have been laid down for those maladies which predominate. When the patient is not suffering from any particular ailment, she should have old 'çáli' rice of the finer varieties, the soup of such pulses as *Cicer lens*, and curries made of brinjals, tender radishes, the fruit of *Ficus Glomerata*, (of the smaller variety), the fruit of *Trichosanthes dioica*, and the plantains called 'Káñchkalá.' Pomegranates and such things as improve the digestive fire and alleviate both wind and phlegm, should also be taken. She should also observe such practices as keep down the wind and the

phlegm. Food that is rich and difficult of digestion, articles that are possessed of keen virtues, exposure to heat, toil, all cooling operations, and sexual indulgence, should be rigidly abstained from in these diseases. For at least three or four months after delivery, the woman should live very carefully.

DISEASES OF THE BREASTS

AND

THE FAULTS OF MILK.

When the three faults, becoming excited by the usual causes, become focussed in the breasts of a woman who is pregnant or who has recently delivered, they cause inflammation and diverse kinds of abscesses. In common parlance, these are known by the name of 'Thunká.'

Improper food and practices vitiate the milk. If it is the excited wind that vitiates it, its taste becomes astringent, and if thrown into water it rises up on the surface without mixing with it. Milk vitiated by the bile becomes pungent, or sour, or saline in taste. Yellow lines are further visible in it. Milk vitiated by phlegm becomes thick and slimy and sinks down in water. If the milk be vitiated by two faults or three, the above symptoms present themselves in a state of union. The infant, by sucking vitiated milk, may get various diseases. That milk, which when thrown into water mixes with it, which is pale in colour, and which is sweet and clear, should be known

Abscesses on the breasts.

Symptoms of vitiated milk.

as faultless. Infants should not be allowed to take any milk that is vitiated.

As soon as inflammation sets in, the milk should be pressed out. Leeches should be set for blood-letting. Plasters should be applied of the roots of *Cucumis Colocynthis*, or turmeric and the leaves of *Datura fastuosa*, pounded into a paste. All the preparations that have been mentioned in the chapters on Abscesses and Bubo may be used. If suppuration follows, surgical operation should then be resorted to or the pus expelled by medicines. In fact, the treatment should be like that of boils.

If the milk be vitiated by the excited wind, the decoction of the ten roots should be prescribed. If it is the bile that vitiates it, the decoction should be given of *Tinospora cordifolia*, *Asparagus racemosus*, the leaves of *Trichosanthes dioica*, the leaves of *Melia Azadirachta*, *Pterocarpus Santalinus*, and *Asclepias pseudosarsa*. If the milk be vitiated by the action of phlegm, the decoction is prescribable of the three myrobalans, the tubers of *Cyperus rotundus*, *Gentiana Chirayita*, *Picrorrhiza kurroa*, *Siphonanthus Indica*, *Cedrus deodara*, *Acorus*, *Calamus* and *Cissampelos hernandifolia*. In case of vitiation through the action of two faults or of all the three, the decoctions of the above drugs combined together should be given.

If the milk in the breasts be dried up, the medicine that should be administered consists of the roots of wild cotton and the roots of the sugarcane pounded together with 'kánji.' The dose should be half a tola. Two other remedies are prescribable, viz., 1. the decoction of turmeric, *Berberis Asiatica*, *Cassia*

Tora, the seeds of *Holorrhena antidysenterica*, and liquorice, and 2. *Acorus Calamus*, the tubers of *Cyperus rotundus*, *Aconitum Heterophyllum*, *Cedrus deodara*, dry ginger, *Asparagus racemosus*, and *Asclepias pseudosarsa*.

In diseases of the breasts the regimen and practices should conform to what have been laid down for deep-seated abscesses. If the milk be vitiated, such food should be taken as is alleviative of the particular fault or faults from which the vitiation has followed. The observations regarding diet and practices which have been laid down in the chapter on the diseases of the lying in room apply to ailments connected with milk.

DISEASES OF CHILDREN.

Many of the diseases of children arise from sucking vitiated milk of either the mother or of the wet-nurse. By sucking milk that is vitiated by the action of the wind, the child catches diseases of the wind. Its voice becomes weak and body emaciated. It feels great difficulty in passing stools and urine and the downward wind. By sucking milk that is vitiated by the action of the bile, the child perspires copiously. Diarrhoea, thirst, heat of the skin, anæmia, and other bile-born diseases also manifest themselves. By sucking milk vitiated by phlegm, salivary secretions, excessive sleep, dulness, deep-seated pains, vomiting of milk, paleness of the eyes and other phlegm-born diseases appear. By sucking milk vitiated by two faults or all the there, the above symptoms manifest themselves in a state of union.

By sucking vitiated milk, or from defects of the lying-in-room, or exposure to cold and other causes of a similar nature, children catch the disease called 'Kukunaka' or 'Kotha.' Its seat is the lids of the eyes. An itching sensation is felt there as also in eyes and the nose. Sun-light becomes painful. The child never opens its eyes, if kept in a lighted place.

If the phlegm in the palate of the child becomes vitiated, it induces a disease called 'Tálukantaka.' The palate sinks, and the child manifests an aversion for sucking. In fact, sucking becomes painful. The other symptoms are excessive thirst, watery motions, and pain in the eyes, the mouth, and the throat. The child vomits the milk that may be forced down its throat, and lies down with bent neck and other symptoms of pain.

If a child sucks the milk, in a copious measure, of a mother who is pregnant, it gets the disease called 'Párigarbhika.' Bronchitis, loss of appetite, vomiting, dulness, drowsiness, emaciation, disgust for food, vertigo, swelling of the abdomen, and other symptoms manifest themselves.

Most children, when they begin to cut their teeth, get fever, looseness of the bowels, bronchitis, vomiting, convulsions, eye-diseases, and numerous other ailments.

Many children, after drinking milk, vomit it out. At first the milk vomited consists of portions that are coagulated like pieces of inspissated milk, or like curds. It has also a sour smell. If the disease is not checked, the vomited matter looks like water. Another symptom that manifests itself is that every-

thing eaten is thrown up. The stomach becomes flatulent, and a rumbling noise is heard within it. The bowels are not cleared. At times the stools become copious. The child becomes weak. Its complexion becomes pale ; its temper irritable ; the body becomes cool, and the skin becomes rough.

Children become at times subject to convulsions which are commonly called 'Tadká.' The
 Convulsions with swoons. general symptoms are loss of consciousness and tossing of arms and legs. This disease arises from various causes. If the heat of the body be increased in consequence of fever or any other cause, if a sudden panic seizes the child, if the body receives wounds, if sudden pains are felt, if abscesses appear, if worms are generated in the intestines, if the child ails for a long period and becomes weak in consequence thereof, such convulsions manifest themselves. When the convulsions set in, the child loses consciousness ; the face becomes pale ; the fingers of the hand close ; the toes become contracted or curved ; and the arms and legs are repeatedly tossed. The paroxysm lasts from one to five minutes. Sometimes, the paroxysms succeed one another, the intervals not being long. The premonitory symptoms of a paroxysm are starts in course of sleep, displacement of the pupil, and contraction of the thumb.

When worms are generated in the stomach or the intestines, the child feels an itching sensation
 Worms. in the rectum and the nose. It scratches the nose very often and suddenly cries out at times. If the worms are large, the child starts in sleep. Another well-known symptom is the grinding of the teeth during sleep. A foetid smell also issues from the mouth. The stools sometimes resemble the exudation of *Odina Wodia*, or become greenish and oily.

In consequence of defective arrangements of the lying-in room, the absence of pure air from it, dampness, foetid smells, and other causes of a similar kind, or of exposure, for a long time, of the child to the heat of fire or the sun after laving it with oil or of exposure to cold, the child gets tetanus. The lower classes in their ignorance regard this disease as due to the possession of the child by evil spirits. In many cases this disease is seen to arise within nine days after the birth of the child. At first lock-jaw manifests itself. Then the vertebral column becomes stiff and then it bends like a bow. The arms and the legs also become stiff, and convulsions set in. The fingers and the toes become contracted. Contortions are seen of the face. If the child be touched, the disease seems to increase in intensity. Very generally, this disease proves fatal.

Diverse planets are said to cast their influence on the bodies of infants. If afflicted by planetary influence, the child may sometimes be seen to be excited and sometimes seized with fear. Sometimes it cries aloud ; sometimes it bites and tears its own body or its mother or nurse with its teeth and nails. Sometimes it remains quiet with upturned gaze, and sometimes it grinds its teeth. At times it is seen to strain ; at other times it yawns. Sometimes it contracts its eyebrows ; and sometimes it bites its own lips with its teeth. It is seen also to vomit frothy matter. The body becomes gradually emaciated. It gets little sleep at night. The eyes become swollen. The stools become watery. Hoarseness of voice succeeds. The body of the child emits the smell of flesh and blood. Besides these, fever, diarrhœa, and other diseases also appear.

Children are unable to say what their complaints are.

Difficulty of treating children.

Hence by their cries, by touch, by careful and minute observation, should the diagnosis be made of many of the diseases under which they suffer. All the cleverness which the physician has is called into requisition. If there is pain in the throat, children repeatedly touch the part with their hands. If the child is afflicted by headache, the skin of the forehead becomes contracted. The child repeatedly touches its head with the hands and pulls its ears. If a healthy child repeatedly cries without any apparent cause, it should be understood that there is biting pain in the intestines caused by indigestion. If an infant who is supported only by suck feels thirsty, it is seen to repeatedly put out its tongue. If in consequence of an attack of cold the child's nose be stopped up, it repeatedly takes off its mouth from the breast while sucking, for drawing breath through the mouth. For three or four months after birth, a child, while crying, does not shed tears. After that age, tears appear. If tears are not seen in a child that is more than four months old while crying, it should be understood that its disease is a serious one. The pulse of a child is naturally quick. Hence it is difficult for an inexperienced physician to ascertain a child's disease by feeling the pulse alone. It is advisable to use the thermometer at the time of examining the child. If at the time of inhaling breath, the nostrils of the child become wider than usual, the child should then be regarded to have caught a severe form of bronchitis or that there is difficulty of breathing. The stomach and abdomen of children are naturally larger than those of grown up men. If, however, these grow bigger than usual, it should be understood that there has been enlargement of

liver, or of the spleen, or of both ; or that indigestion will soon set in. If there is pain in the ear, the child may be seen to put its hand on the ear and to guard the ear against being touched by others.

If the milk of the mother be vitiated, the child should never be allowed to suck it. A nurse
 Selection of a Nurse. should then be appointed with good milk in her breasts. In selecting a nurse the following considerations should be attended to. The age of the nurse should not be less than twenty or more than thirtytwo years. The milk of women below twenty or above thirtytwo years of age is not regarded healthy. The nurse should be free from every disease. She should have a healthy child of her own of the same age. She should have breasts full of milk. Her conduct should be pure. She should be of a cheerful mind. If such a nurse cannot be had, the child should be fed with goat's milk, or cow's milk diluted with water and sweetened with sugarcandy. If the child be below twenty-one days, and if its mother's milk be vitiated, it should be given cow's milk diluted with lime-water in equal proportions. If flatulence of the stomach be noticed, milk mixed with one tola of the infusion of coriander seeds or fennel seeds should be given. By weaning the child, diseases due to vitiated milk may gradually be got over. If the palate sinks, chebulic myrobalans, the fruit of *Acorus Calamus*, and *Aplotaxis auriculata*, reduced to pulv and mixed with honey and the mother's milk, should be given.

If infantile ophthalmia, or the disease called 'Kukunaka' manifests itself, the eyes should be
 Infantile ophthalmia, &c., washed with lukewarm water poured over them from a height of about nine inches. A piece of cloth drenched in warm water should be used for clearing

the secretions. Take also a rati of sulphate of copper and dissolve it in clean water. Keep the water in a phial.* A drop or two of this water should be cast into the eye thrice or four times a day. Plasters should be applied on the eyelids, made of *Berberis Asiatica*, the tuber of *Cyperus rotundus*, and red ochre, pounded together with goat's milk. Collyrium made of lamp-black received on the exudation *Trophis aspera*, proves beneficial.

In the disease called 'Párigarbhika' the treatment at the outset consists of weaning the child. Treatment of 'Párigar-
bhika.' Indeed, if the child be allowed to suck the vitiated milk of the mother, no medicine can do it any good. For improving the digestive fire, 'Yamánipanchaka,' 'Hingwashtaka-churna, and other medicines of mild energy that occur among those laid down in the chapter on loss of appetite should be given in small doses. The milk given to the child should be mixed with water or the infusion of fennel seeds. In diarrhœa and other ailments that may break out at this period, the treatment should be as laid down in the chapters on those diseases. The administration of 'Kumarakalyána-rasa' proves very beneficial in 'Párigarbhika' and other diseases which supervene it.

During the time of teething children catch diverse ailments such as fever, looseness of bowels, &c. Treatment of diseases
that set in at the time of
teething. It is not advisable to administer medicines at the outset, for it is seen that as soon as the teeth come out, those diseases disappear of themselves. Teething is expedited by rubbing the gums with the paste of the flowers of *Grislea tomentosa* and the pulv of the fruit of *Piper longum*, mixed with honey, or with the expressed

juice of the fruit of *Phyllanthus Emblica*. When medicines become necessary for treating the diseases that manifest themselves at the time of teething, the following should first be prescribed with discretion, *viz.*, 'Dantodbhedagadántaka,' 'Kumarakalyána' and 'Pippalyádya-ghrita.' If teething is delayed, and if in consequence of this the child suffers much, incisions should be made upon the gums with a knife.

For preventing the vomiting of milk, the milk that should be given to the child should always be Vomiting of milk. mixed with lime-water. If this does not check the disease, milk should be at once stopped. Broth should be the substitute. The child should be allowed to take the expressed juice of *Solanum Indicum*, and *Solanum Xanthocarpum*, or the pulv of the fruit of *Piper longum*, the roots of the same, *Piper chaba*, and roots of *Plumbago Zeylanica*, and dry ginger, mixed with honey and ghee. By licking also the pulv of mango seeds, fried paddy, and 'Saindhava' salt, mixed with honey, the vomiting of milk may be checked. Another remedy consists of rubbing the belly of the child with mustard oil thrice or four times a day. The belly should also be wrapped with a piece of flannel.

When convulsions with swoons set in, efforts should first be made to bring back consciousness. Treatment of convulsions. By heating the forehead of the child with a piece of heated turmeric or iron rod, the child may be restored to consciousness. Cold water should be sprinkled over the eyes. If these means do not succeed, 'Nisádal' mixed with lime, should be held before the nose. The powerful scent of this preparation often succeeds in bringing consciousness back. After the child is restored to its senses,

that particular disease which is the cause of the convulsions with swoons should be treated. If the disease has been brought about by the intense heat of fever, cold water should be applied on the head, the face and the eyes, the backbone, and the hinder part of the head. Oil mixed with water should be rubbed on every part of the body. If the child feels thirsty, it should be allowed to drink as much cold water as it can. If the intensity of the heat abates in consequence of these remedies, the violence of the convulsions also ceases. If the disease be due to weakness, the child should then be dipt up to the knee in a vessel filled with tepid water in which has been dissolved the pulv of the larger variety of mustard seeds. The child should not be moved much while undergoing this operation. Taking wheat flour and the pulv of mustard seeds of the larger variety, in equal measures, and mixing them together and making a paste of it by adding water, plasters should be applied on the calves of both the legs. Dry fomentation should be applied to the arm-pits, the hand and the feet, for keeping them warm. The pulv of dry ginger should also be rubbed over the hands, the legs, and the chest. If the convulsions with swoons be due to the action of worms, the child should then be dipt, up to the neck, in a tub of tepid water, and cold water should be poured upon the head from a height of 6 to 9 inches. Five or six minutes after, the child should be taken up from the tub, rubbed with a dry towel, and laid down on its bed.

In all varieties of convulsions with swoons a little castor-oil should be administered with milk after the paroxysm is over. Purging proves beneficial at this stage. For preventing repeated paroxysms, a little of the wine called 'Mritasanjivani' with four times as much water, should

be given ; or, if that stimulant be not available, a little of brandy may be used as a substitute. The fact is, it is necessary to lull the child to sleep.

For killing worms, the expressed juice of the leaves of 'Bhánt' (*Clerodendron infortunatum* ?) or other anthelmintics should be administered. If the worms be small ones, the use of enemas with salt water proves very beneficial. Taking a little quantity of salt, it should be dissolved in a 'chattach' of water. This water should be inserted into the anal canal of the child by means of a small glass syringe. Care should be taken that no injury is inflicted by the syringe. Its pointed mouth may be laved with a little oil before it is inserted into the rectum. The water should not be allowed to come out immediately. Indeed, the rectum should be closed by pressing the thumb against it for two or three minutes. By repeating this operation for two or three days, great benefit is certain to be derived.

For restoring consciousness in tetanus, the methods recommended in convulsions with swoons should be resorted to. After consciousness is restored, the child should be allowed to suck the mother's breasts. If it cannot suck, the mother should press out her milk and administer as much of it to the child as possible. If the mother's milk be vitiated, or if it be not available, cow's milk may be used as a substitute. If purgatives cannot be administered, a little castor-oil, mixed with oil of turpentine, should be rubbed upon the stomach of the child. Cold water should also be sprinkled upon the stomach. Of course, purging the patient by internal administration of a little castor-oil is very beneficial. For inducing sleep, poultices should be applied on the navel.

made of the dried flowering tops, or the leaves, of *Cannabis Sativa*. * The wine called 'Mritasanjivani,' or, if it be not available, brandy, may also be used for inducing sleep. A little quantity, diluted with four times as much water, is necessary to be administered. The fact is, as sleep does great good, it should be induced by any means that is available. If the child cannot drink wine, it should be administered by the aid of an enema syringe. The child should be bathed in tepid water. The oil called 'Kubja-prasārini,' which alleviates the excited wind, if rubbed over the body of the child, proves very beneficial.

In ailments caused by planetary influences, the methods recommended in astrological treatises for the propitiation of the malignant planets should be adopted. The child should also be bathed in water mixed with the decoction of these drugs, *vis.*, 'Murāmāngsi,' † *Acorus Calamus*, *Aplotaxis auriculata*, the species of lichen called 'çailaja,' turmeric, *Berberis Asiatica*, *Circuma Zerumbet*, *Michelia Champaca*, and the tubers of *Cyperus rotundus*. This bath is called the 'Sarbaushadhi' bath (*i. e.*, bath in the decoction of all the medicinal plants.)

* *Cannabis sativa*, or Indian hemp, is used in three forms : 1. the dried flowering tops, called 'Gánjá'; 2. the resinous exudation from the leaves, stems, and flowers, called *charas*; and 3. the larger leaves and seed vessels, called 'Bhāng' or 'Siddhi.' The first two are smoked. The last is reduced to a paste and then dissolved in water. It is drunk, with or without sugar.—T.

† 'Murāmāngsi' is a kind of scented object. Its Sanskrit names are 'Tāla-parṇi,' 'Daityá,' 'Gandhakuti,' 'Gandhini,' 'Bhuta-gandhá,' 'Murá,' and 'Sarabhi.' It occurs in all parts of India. In Mahārāshtra it is called 'Mura' and in the Carnatic, 'Mure.'

In Infantile fever, the decoction of the group beginning with 'Bhadra-musta' (a variety of *Cyperus*), also 'Rámeswara-rasa,' and 'Bálarogántaka-rasa', should be administered.

Treatment of Infantile
Fever.

Among the medicines, again, that have been laid down in the chapter on Fevers, those which are of mild energy may be administered in proper measure. In fever with diarrhœa, 'Dhátakyádi' and 'Bálachaturbhadríká-churna' prove beneficial. For checking diarrhœa, gruel made with the paste of *Mimosa pudica*, *Grislea tomentosa*, the filaments of the lotus, *Tinospora cordifolia*, and the roots of *Mucuna pruriens*, should be administered. The bark of *Spondias mangifera*, that of *Mangifera Indica*, and that of *Eugenia jambolana*, reduced to pulv and mixed with honey, should be given to the child to lick. Two other medicines, viz., 'Lavanga-chatuhsama' and 'Dádimba-chatuhsama,' prove very efficacious in infantile diarrhœa. For checking bloody diarrhœa, gruel prepared with the paste of *Mimosa pudica*, *Grislea tomentosa*, and the filaments of the lotus, is very beneficial. Another remedy consists of goat's milk and the expressed juice of the bark of *Eugenia jambolana*, mixed together in equal proportions. Considerable benefit is derived also from the following preparation : take dried pieces of the fruit of *Ægle Marmelos*, the seeds of *Halarrhena antidysenterica*, *Pavonia odorata*, the exudation of *Bombax Malabaricum*, and the tubers of *Cyperus rotundus* : the measure of all these together should be 2 tolas. These should be boiled in sixteen tolas of goat's milk mixed with one seer of water. The boiling should be over when sixteen tolas of the liquid remain. This liquid, after being strained, should be given to the child. Besides being a remedy for bloody diarrhœa, it cures lenteric dysentery as well. In

infantile dysentery, the pulv of fried paddy, the pulv of liquorice, sugar, and honey, mixed together and dissolved in water in which 'átapa' rice has been washed, prove beneficial. The other remedies for this ailment are 1. cumin seeds of the white variety, and the exudation of *Shorea robusta*, pounded with the expressed juice of the leaves of *Ægle Marmelos*, and 2. the pulv of the white exudation of *Shorea robusta*, mixed with treacle. For lenteric dysentery, take pepper, one part ; dry ginger, two parts, and the bark of *Holarrhena antidysenterica*, four parts: reduce these to powder and mix them, adding treacle and whey. This medicine gives relief in lenteric dysentery. The other medicines laid down for diarrhœa may be also used. The scriptural medicines, called 'Bálakutajávaleha' and 'Bálachángerí-ghrita', are very efficacious for chronic diarrhœa, bloody diarrhœa, and lenteric dysentery. When there is purging and vomiting, the decoction of dry pieces of the fruit of *Ægle Marmelos* and the kernel of mango seeds, mixed with the pulv of fried paddy and sugar, does great good. By applying on the head plasters made of the leaves of *Zizyphus Jujuba*, those of *Oxalis corniculata*, those of *Solanum nigrum*, and those of *Feronia elephantia*, pounded together, much benefit may be derived in this ailment. In epistaxis and 'çula' pains caused by excited wind, the pulv of these, viz., 'Saindhava' salt, dry pieces of the fruit of *Ægle Marmelos*, *Elettaria Cardamomum*, assafœdita and *Siphonanthus Indica*, mixed with ghee, should be licked, or dissolved in water should be drunk. In thirst, the seeds of pomegranates, cumin seeds, and the filaments of the flowers of *Mesua ferrea*, reduced to pulv, and mixed with sugar and honey, should be given to the child to lick. If the child suffers from hiccup, it should be given red ochre mixed with honey to

lick. The other remedies which alleviate hiccup, as also asthma and bronchitis, are 1. the roots of *Plumbago Zeylanica*, dry ginger, the roots of *Croton polyandrum*, and *Sida alba*, reduced to powder and dissolved in warm water ; and 2. grapes, *Hedysarum Alhagi*, Chebulic myrobalans, and *Piper longum*, reduced to powder and mixed with ghee and honey. The first should be given as a drink, and the second for licking. For alleviating bronchitis, the fruit of *Solanum Indicum*, the fruit of *Solanum Xanthocarpum*, and the fruit of *Piper longum*, are very efficacious. The pulv of these, in equal measures, mixed with honey, should be given to the child to lick. Another linctus made of the pulv of these, viz., *Aplotaxis auriculata*, *Aconitum heterophyllum*, *Rhus succedanea*, *Piper longum*, and *Hedysarum Alhagi*, mixed with honey, relieves all varieties of bronchitis. By administering a little of 'Makaradhwaja' with the expressed juice or the decoction of *Solanum Xanthocarpum*, bronchitis with fever is alleviated. 'Kantakari-ghrita' also is very beneficial in bronchitis and asthma. Amongst the medicines laid down in the chapter on bronchitis and fever, those which are of mild energy may be prescribed with discretion for alleviating infantile bronchitis and fever. The dose should always be small. In infantile strangury, a linctus made of *Piper longum*, pepper, sugar, honey, cardamoms, and 'Saindhava' salt, proves very efficacious. If sores appear in the mouth, take a little borax and rub it in honey, and apply it to the sores twice or thrice a day. By applying the milk of sheep also, much benefit is derived. If suppuration of the ear takes place, the ear should be first washed by means of a little syringe, using tepid water, or milk diluted with water and made tepid. After washing, the ear should be softly rubbed with a brush made of sponge or a piece

of cloth, so that no water may remain within it. The brushing being over, pour two or three drops of *átar* into the cavity. Alum water, as also the solution of lac-tye, slightly heated on fire, does much good. In 'Pámá,' (Eczema), 'Vicharchiká' (Psoriasis), and other skin diseases, plasters should be applied as laid down in the chapter on those ailments. Our own 'Kshatári' oil, and other oils prescribable in sores, may be used with beneficial results. If the nourishment of the child be retarded, 'Açwagandhá-ghee' should be administered. If a new-born babe becomes unable to suck, pulv of the fruit of *Phyllanthus Emblica* and Chebulic myrobalans mixed with honey, should now and then be rubbed upon its tongue. By this means the dulness of the tongue is removed and the child soon becomes able to suck.

As regards the pulvs enumerated above, the dose should be
 7 ratis for children below one month.
 Measure of dose for children. As the child's age increases, the dose also should be increased at the rate of one rati a month, so that for a child whose age is two months, the dose should be 2 ratis; for one whose age is three months, it should be three ratis, and so on. When the child is one year old, the dose should be increased at the rate of one máshá a month.

When a sucking child catches any disease, the mother who
 Diet and forbidden practices. gives it suck must observe the regimen that is laid down for that disease. The child should never be made to fast. The fact is, when fast would be prescribable, diet of the lightest kind should be given to the child. In diarrhoea and other diseases, instead of cow's milk, goat's milk should be given in proper measure. If goat's milk cannot be digested, arrow-root or our own 'Sanjivan-kh ádya', should be given.

To a new-born and healthy child, cow's milk should not be given. The milk of its mother is sufficient to nourish it. The hours should be fixed for giving it suck. No rules need be made during the first month. After, however, the first month, the times should be fixed for giving suck. Indeed, after the first month, suck should be given at intervals of two hours during daytime, and three hours during the night. When the child is more than three months old, suck should be given to it four times during the day and thrice during the night. After the fourth month, suck should not be given more than twice during the night.

Rules about suck.

The child should not be weaned before it is nine months old. It is proper to wean it after it is one year old. Care should be taken to wean it gradually, for the consequence of stopping suck at once may be indigestion and other diseases.

Rules about weaning the child.

Either cow's milk or goat's milk should be given, a little at a time, so that the child may be gradually habituated to it. Ass's milk is not proper food. The new-born babe should have milk diluted with equal measures of water and lime-water, heated on a fire, and mixed with sugar or the pulv of sugar-candy. Every time milk is given to it, it should be thus prepared. After the child is seven days old, the milk given to it should be mixed with lime-water alone, the proportion being milk two parts and lime-water one part. Till it is a month and a half old, lime-water, in the same proportion, should be used in diluting the milk. Till it is five months old, the proportion of lime-water should be one to four. After that age, lime-water is not necessary.

The milk that should be given to the child.

For the first two months, milk should be given to the child six times during the day, and twice during the night. Indeed, milk should not be given irregularly and often. In giving it milk, the mother or nurse should see that the child takes it willingly. As soon as any sign is manifested of unwillingness, the feeding should be stopped. Evil consequences arise from forcing milk down the throat without regard to the unwillingness of the child. After the child is two months old, it should have milk four times during the day and once only during the night. When it is six or seven months old, that is, when the two front teeth or incisors appear, some light food besides milk may be given once or twice a day. Milk and sago, or wheat-flour fried in ghee, boiled in milk, and sweetened with sugar-candy, is the kind of food that is recommended. When it is older, milk and rice, or rice boiled in milk and water and sweetened by the addition of sugar, may be given. Before the child is full two years of age, rice should not be given to it as regular food.

Directions about the keep and practices of children. The room in which the child is kept should be large or spacious, and clean. It should be properly ventilated. In the winter season, during the night, as also during rainy days, the windows should all be closed. The child's body should be carefully wrapped with cloth during the winter as also on rainy days. At other times, the body may remain exposed. Children's shirts should be loose and not tight. Occasionally the child should be rubbed with oil and bathed in cold water agreeably to its bearing capacity. Till it becomes three or four years old, it should be allowed to sleep during the day. Before the child learns to walk, its powers should not be put to any strain. The child's

fears should not be excited by frowns or by the mention of monsters. It should not be made to cry. Its body or limbs should not be frequently moved. Children should have sufficient play during their earliest years.

POISONS AND THEIR TREATMENT.

Generally speaking, poisons are of two classes, *viz.*, those derived from animated creatures and those which are obtained from inanimate objects. The roots of particular vegetables, or their tubers, or leaves, or flowers, or fruits, or barks, or exudation, or expressed juice, or pith, or such minerals as 'dármutj' and arsenic, are poisons that are of inanimate origin. The poison of scorpions, and other animals belongs to the other class.

Amongst poisons of inanimate origin, if it is the poison of roots that has entered the body, one feels as if one has been belaboured with sticks or clubs. Besides such pain and stiffness, the other symptoms are delirium and loss of consciousness. The poison of leaves causes tremours and difficulty of breathing. The poison of fruits causes swellings in the testicles, burning of the body, and disgust for food. The poison of flowers causes vomiting, flatulence, and swoons. If one takes the poison of barks, of exudations, or of piths, a bad odour issues from the mouth. The skin becomes rough ; a severe headache is felt ; and phlegmous secretions take place. The poison of the milky juice causes

froth to issue out of the mouth. Its other symptoms are heaviness of the body and purging. Mineral poisons cause pain in the heart or the cardiac region, a burning sensation in the palate, and swoons. Many of these poisons are not productive of immediate death. Causing diverse kinds of ailments, they bring about death after sometime.

Amongst poisons having their origin in animated creatures, the symptoms of that which belongs to hooded snakes are that the bitten part becomes dark, and the person bit is afflicted by diverse sufferings brought about by the excited wind. As regards snakes which have circular spots on their body, their poison produces other effects. The part bitten becomes yellow. A soft swelling appears. Diverse kinds of afflictions appear which are generated by the excited bile. When snakes which have long stripes on their bodies bite a person, a hard, slimy, and pale swelling appears on the part bitten. Oily and thick blood issues from the puncture. Diverse afflictions caused by excited phlegm also appear. Persons suffering from indigestion, those whose bile has been vitiated, those who are weakened by exposure to the sun, children, old men, those who are hungry, those who are weak and have sores, those who have diabetes, those who have leprosy, women during the state of pregnancy, and persons whose bodies have dried up, when bitten by a snake, are soon reduced to the last straits.

If one is bit by a snake when one is at the foot of an *Açwattha* (*Ficus religiosa*) or in a crematorium, or upon an anthill, or at a place where four roads meet, such bite generally proves fatal. The simple reason is that hooded snakes of virulent poison generally reside in such places.

The symptoms of animate poison.

Fatal symptoms of snake-bites.

Similarly, if one is bit in the morning, or the evening, or at a time when the constellations Bharani, Ardra, Maghá, Açleshá, and Krittiká, are on the ascendant, the bite ends fatally. A person bit in any of the vital parts of the body, seldom recovers. If no blood, even when wounds are inflicted with a knife, issues from the body of a person that is bit, he meets with death. If no marks appear on the body of a bitten person who is scourged with whips, the result proves dissatrous. If cold water repeatedly sprinkled on the body of a bitten person does not produce horripilation, the bite ends in death. If the face of a bitten person becomes curved, if his hair comes off when pulled, if he cannot keep his neck erect, if lockjaw appears, if a red or dark swelling appears on the bitten part, if salivary secretions fall from the mouth in streams thick as wax candles, the result frequently becomes unfavourable. If, again, the marks of four teeth be visible on the bitten part, the case becomes incurable.

If a person is bit by a scorpion or centepede, an intense burning pain is felt. The bitten person feels as if he is being pierced through and through with a sharp instrument.

Different symptoms of different kinds of animal poison.

The poison soon spreads over the whole body and a swelling appears on the bitten part. If one is bit at the region near the heart, or in the nose, the eyes, or the tongue, the consequence is that the bitten part begins to rot and the flesh comes off in sloughs. The person suffers acute agony and not unoften meets with death. Sometimes a frog bites a man. The consequences are thirst, sleep, vomiting, swelling with pain, and the appearance of small pimples on the bitten part. There is poison in the semen of rats and mice. If a person comes in contact

with such semen, the symptoms of poison appear in his body. There are some kinds of rats whose bite produces symptoms of poison on the body. The bite of a rat or a mouse induces bleeding from the puncture. Circular swellings appear here and there on the body. Besides, fever, restlessness of mind, horripilation, and burning of the body are the other symptoms. There are some rats and mice whose bite produces swoons or loss of sense, mouse-shaped swellings on the body, deafness, fever, heaviness of the head, discoloration of the body, salivary secretions from the mouth, and vomiting of blood. Death very often results from such bites. From the bite of the spider, blood may flow. The bitten part becomes covered with filthy secretions. The other symptoms are fever born of all the faults, diarrhœa, burning, pimples, circular spots on the body, and swellings that are blue or yellow, soft to the touch, and frequently changing their position. The bites of some other animals produce burning, swelling with pain, and other symptoms of poison.

If rabid dogs and jackals bite a person, the results are the flow of dark blood from the bitten part and partial loss of the sense of touch there. If the poison remains in the body for a few days, it brings on fever and at last the person becomes mad and cries like a dog or a jackal, desires to bite others, and imitates those animals in other respects. Indeed, death frequently results from these bites. The bitten person sometimes sees in water the image of the animal that has bit him. The sight or adjacence of water becomes painful to him. He cannot hear of water without feeling pain. When those symptoms appear, death becomes certain. The poison of rabid dogs and jackals may remain

The poison of rabid jackals and dogs.

in the body of a person for a long time without producing any effect, till, all on a sudden, it becomes excited and causes the appearance of fatal symptoms. Sometimes the poison lies dormant for a whole year, or even two years. At the expiration of this period, the symptoms of insanity and hydrophobia appear.

If mild poisons enter the body with food or drink, they do not lead to death, but mingling with the phlegm and remaining in that state for a long time in the body ultimately induce looseness of the bowels, discoloration of the body, a fœtid smell in the mouth, tastelessness, thirst, swoons, vertigo, vomiting, hoarseness or change of voice, and other symptoms of a similar kind. If the poison remains in a state of dormancy in the 'amáçaya,' it produces many ailments that are born of excited phlegm and wind. By lying for a long time in the 'pakkáçaya,' it produces diverse diseases born of wind and bile, and causes the hair in every part of the body to fall off. If the poison remains in the juices of the body, it produces disgust for food, weakness of the digestive fire, pain all over the body, weakness or loss of strength, fever, nausea, heaviness of the limbs closing up of the pores of the body and, therefore, stoppage of perspiration, tastelessness of the mouth, premature shrinking of the flesh and whiteness of the hair. If it remains in the blood, it produces leprosy, erysipelas, pimples, enlargement of the spleen, bloody bile, chloasma, and brown spots on the face. By remaining in the flesh it produces fleshy tumours, bleeding sores, piles, ranula, and other kinds of fleshy growths. If it remains in the adeps, it produces cystic tumours, enlargement of the scrotum, diabetes, obesity, and excessive perspiration. If it remains in the bones, it produces bony growths, extra

teeth, pain in the bones, and psoriasis of nails. Remaining in the marrow, it causes the sight of darkness, swoons, vertigo, a sensation of heaviness in the joints, and ophthalmia. If it remains in the semen, it produces spermatorrhœa, and stoppage of the discharge of semen. Sometimes these poisons have been seen to produce even insanity. The poison that remains in the body is excited when the body is exposed to cold breezes or when the day is a cloudy one. The premonitory symptoms of the excitement are excess of sleep, heaviness of the body, langour, yawns, horripilation, and relaxation of the limbs. Then comes a sense of intoxication like to what is sometimes caused by betel-nuts. The other symptoms are indigestion, disgust for food, circular spots on the skin, waste of flesh, swellings in the hands and the feet, swoons, vomiting, diarrhœa, asthmatic breathing, thirst, fever and enlargement of the belly.

If one takes opium in a copious measure, the consequences are an intolerable burning of the
 Opium-poisoning. body, a sensation as if the brain is

bursting, flatulence, stupefaction, and vertigo. Death is sure to result if the opium cannot be expelled from the system or its effects promptly neutralised by treatment.

If one is bit in the arm or leg by a poisonous snake, the
 Treatment of snake-bite. arm or the leg should be, without loss
 of time, tightly bound, above the bitten

part, with a cord. This would prevent the poison from spreading into the system. After binding, the bitten part should be subjected to an incision with a knife and blood let out from it. One may even suck the poison out with one's mouth if there be no sores in it. A horn or tube may be employed for sucking, or the process known as cupping may be resorted to. The fact is, no means should be left untried for causing the

poisoned blood to flow out. After this, the bitten part should be cauterised by fire or by a red-hot iron rod or knife-blade. If one is bit at any other part of the body, that is, where circulation cannot be stopped by binding, blood should be let out by the aforesaid means and the bitten part should also be cauterised. Considerable benefit may be hoped for from these processes. When, however, the poison has spread all over the body, emetics should be administered and the bitten person made to vomit. By using as snuff the pulv. of the roots of Káliakará (Sans. Kákádani, *Capparis sepiaria*), much benefit may be derived. The person should also snuff the roots, reduced to paste, of *Gloriosa superba*. If the functions be suspended of the organs of scent, vision, hearing, and taste, and if the voice also be stopped, the snuff should be administered of brinjals, the fruit of *Citrus medica* (variety, *acida*), and *Cardiospermum Halicacabum*, grinded into a paste with water. If vision be gone, collyrium should be applied into the eyes, made of *Berberis Asiatica*, pepper, the fruit of *Piper longum*, dry ginger, turmeric, *Nerium odorum*, *Gale-dupa Indica*, the leaves of *Ocimum sanctum*, and goat's milk, grinded together into a paste. Another efficacious medicine consists of this: take the kernel of the seeds of *Croton Tiglium*; drench them (according to the process called 'Bhavaná') for one and twenty times in the expressed juice of the fruits of *Citrus medica*; grind them into a paste and make sticks of that paste. If the sticks be rubbed in human saliva and the product applied to the eyes as collyrium, the result proves very beneficial. Snake-bit persons, deprived of consciousness and prostrated on the ground, have been seen to recover through application of this collyrium. Drenching the seeds of *Moringa pterygosperma*, in the expressed juice of the flowers of *Mimosa sirissa*, for seven days, grind them into a

paste. By administering this paste as a snuff and as a collyrium, and by giving it as a drink after dissolving it in water, snake-poison may be neutralised. Another efficacious medicine consists of the following : take equal measures of the pulv of the following, viz., the roots of *Convolvulus Turpethum*, the roots of *Croton polyandrum*, liquorice, turmeric, *Berberis Asiatica*, *Rubia cordifolia*, the kernel of the fruit of *Cassia fistula*, the five salts, and the three bitters ; mix them together with honey ; keep the mixture within the horn of a cow for fifteen days. Take it out after that period. Four annas, or a little over it, should be administered, mixed with milk, ghee, and honey. By applying it also as a plaster over the bitten part, or causing it to be used as snuff, beneficial results may be expected.

When a hooded snake bites a person, he should be given the decoction of the roots of *Vitex*
 Bites of hooded snakes. *Nigundo*, *Clitoria Ternatea*, and *Echites dichotoma*, to drink. When one is bit by a snake having circular spots on its body, the decoction should be drunk of *Rubia cordifolia*, honey, liquorice, 'Jivaka,' 'Rishabhaka,' sugar, the bark of *Gmelina arborea*, and the sprouts of *Ficus Indicus*. In bites of snakes having long stripes on their bodies, the decoction, mixed with honey, should be drunk of pepper, *Piper longum*, dry ginger, *Aconitum heterophyllum*, *Aplotaxis auriculata*, soot, *Piper aurantiacum*, *Tabernemontana coronaria*, and *Picrorhiza Kurroa*. The decoction of soot, turmeric, *Berberis Asiaticus*, and the roots of *Amaranthus spinosus*, mixed with ghee, is an antidote for all sorts of snake poison. The roots of *Cleome Viscosa*, grinded into a paste with eight or ten peppers, dissolved in water, and given as a drink, neutralise all kinds of snake-poison. After administering this medicine, alum water should be given to

drink. If this water is thrown out, it should be understood that the poison has not been neutralised. The medicine should then be administered once more. The spots of *Heliotropium Indicum*, as also those of *Kempferia rotunda*, operate as antidotes of snake-poison.

In scorpion bites, the bitten part should be repeatedly rubbed with turpentine oil. Plasters should also be applied of coal rubbed on a stone with water. The poison of scorpions may also be neutralised by applying plasters made of the ghee of cow's milk, mixed with 'Saindhava' salt, heated on a fire, or of cowdung heated on a fire. By rubbing the exudation of the stalks of *Colocasia Indica* of the black variety, the action of scorpion poison may be neutralised. The pain of scorpion bites may be relieved by applying sticky treacle to the bitten part.* For neutralising the venom of toads and frogs, blood should first be let out and plasters should then be applied on the bitten part of the seeds of *Mimosa sirissa*, grinded into a paste with the exudation of *Euphorbia nerifolia*. For treating bites of rats and mice, blood should be first let out, and then plasters should be applied made of soot, *Rubia cordifolia*, turmeric, and 'Saindhava' salt, grinded together and slightly heated on a fire. By drinking warm water in which have been dissolved the pulv of the bark of *Cinnamomum Zeylanicum*, and that of dry ginger, one obtains much relief. For neutralising the poison of spiders, plasters should be applied of the following, viz., red sandal wood, 'Padmakáshtka,' the roots of *Andropogon muricatum*, *Bignonia suave-olens*, *Vitex Nigundo*, *Cleome fetina*, *Tabernaemontana coronaria*, *Mimosa sirissa*,

* Treacle, by being boiled for some time, becomes sticky. It is called (in Bengali) 'chite-gur.'—T.

Pavonia odorata. and *Asclepias pseudosarsa*. Equal measures of each of these should be taken and mixed together. Add the pulv of *Aplotaxis auriculata* of double the measure. Grind the compound with the juice of *Cordia Myxa*. The poison of spiders, as also of other insects, is neutralised by also the decoction of *Clitoria Ternatea*, the bark of *Pentaptera Ajuna*, *Aplotaxis auriculata*, *Cordia Myxa*, *Ficus religiosa*, *Ficus Indicus*, *Ficus infectoria*, *Ficus glomerata*, and the bark of *Calamus rotang*. By applying also the exudation of the plantains called 'kánchkalá,' three or four times every day, the venom of spiders may be neutralised. Another method for neutralising the venom of spiders consists of this : take a few pieces of raw turmeric ; pound them with cow's milk and apply the paste over the envenomed part. Take, again, the following drugs : the fruit of *Acorus calamus*, assafœdita, *Embelia Ribes*, 'Saindhava' salt, *Pothos officinalis*, *Cissampelos hernandifolia*, *Aconitum heterophyllum*, dry ginger, *Piper longum*, and pepper ; reduce each to pulv and mix the pulvs in equal measures. By taking this medicine internally, the dose being 4 annas, the poisons of all insects and worms is certainly neutralised.

When a rabid dog or jackal bites a person, incisions with a knife should be made upon the bitten part, and blood let out first. After this, the part should be cauterised with fire, or heated iron, or alkaline ashes, or hot ghee. Old ghee should be given to drink. The person should also take a rati or two of the roots of *Datura fastuosa*, or of the fruit of *Strychnos nuxvomica*. From the day of the bite, the bitten person should take 'bháng.' This produces good results. The roots of *Boerhavia diffusa* (of the white variety) and those of *Datura fastuosa*, pounded together and

Treatment of dog-bites,
&c.,

administered with water, operate beneficially. Another remedy consists of this ; take a tola of each of these, *vis.*, mercury, sulphur, and pure iron, and 2 tolas of talc ; drench these successively (according to the process called 'Bhāvanā'), once, in the juice of the fruit of *Cucumis Colocynthis*, *Solanum Indicum*, *Gratiola monniera*, *Nymphaea stellata*, *Asparagus racemosus*, and *Mucuna pruriens*. Divide the compound into pills each of the measure of one rati. These pills should be administered, one every day, with cold water. The bitten person derives much benefit by taking as snuff burnt cowdung cakes drenched in the exudation of *Calatropis gigantea* and dried in the sun. In dog-bites benefit is derived from plasters applied on the bitten part made of the seeds of *Mimosa sirissa* rubbed in the exudation of *Euphorbia neriifolia*. By pounding a little rice with water and administering it, after inserting within it a little wool, much benefit may be expected.

If a person swallows poison, or any poisonous article, or opium, emetics should be administered for making him vomit. Amongst others, water in which sulphate of copper has been dissolved, operates as a good emetic. When the poison has reached only the throat, raw fruit of *Feronia elephantia*, sugar, and honey, mixed together, should be licked. When it has reached the 'āmāçaya', the bark of *Tabernamontana coronaria*, sugar, and honey, mixed together, should be licked. If the poison has reached the 'pakkāçaya,' the patient should take the following drink, *vis.*, *Piper longum*, turmeric. *Berberis Asiatica*, *Rubia cordifolia*, pounded together with 'Go-rochana' (concretions found in the gall-bladder of the ox) into a paste and dissolved in water. If the poison has entered the blood, one should drink the decoction of the roots, bark,

Treatment of persons who
have swallowed poisons.

and sprouts of *Cordia Myxa*, or the roots, bark, and sprouts of *Zizyphus Jujuba*, or the roots, bark, and sprouts of *Ficus glomerata*, or the roots, bark, and sprouts of *Clitoria Ternatea*. If the poison has entered the flesh, one should take 'Khadii-
rishta' mixed with honey, or the roots of *Holarrhena antidysenterica*, pounded into a paste and dissolved in water. If the poison permeates the whole body, and if the phlegm becomes predominant, the following drugs, reduced into a paste and mixed with cheese, should be rubbed on the body : *Sida cordifolia*, *Sida alba*, liquorice, the flowers of *Bassia latifolia*, *Tabernæmontana coronaria*, *Piper longum*, dry ginger, and the ashes of incinnerated barley stalks. Unto a person who is afflicted by fault-exciting poisons, medicated oils should first be administered. He should then be purged and made to vomit. The decoction of *Piper longum*, roots of *Andropogon muricatum*, *Nardostachys jatamansi*, *Symplocos racemosus*, *Elettaria cardamomum*, 'Sauvarchala' salt, pepper, *Pavonia odorata*, cardamoms of the larger variety, and golden ochre, mixed with honey, neutralises such poisons.

Take in equal measures the pulv of the following, viz.,
 Scriptural medicines. realgar, yellow orpiment, pepper, white
 arsenic, 'Hingula', the roots of *Achyran-*
thes aspera, those of *Datura fastuosa*, those of *Nerium*
odorum, and those of *Mimosa sirissa* ; drench the compound
 a hundred times (according to the process called 'Bhāvanā'),
 in the juice of *Elæocarpus Ganitrus*, as also of *Clitoria*
Ternatea ; and divide it into pills of the size of the grains
 of *Phaseolus Mungo*. These pills can revive a person who
 has become insensible through the action of snake-bite or
 of poison swallowed. This medicine is called 'Bhima-rudra-
 rasa.' Take the following, viz., the roots of *Capparis sepiaria*,
 the bark of the roots of *Echites scholaris* and *Aplotaxis auri-*

culata. The measure of each should be one *tola*. Add white arsenic of the measure of one *máshá*. Pound these together in the decoction of the roots of *Calatropis gigantea*, and divide the paste into small pills of the size of mustard seeds. These are called 'Kaliká' pills. By administering them, even a person who is, through the action of poison, on the point of death, can be promptly brought back to life. This medicine operates beneficially in cases of obstinate chronic remittent fever also. Take ghee, one seer; and the expressed juice of *Achyranthus aspera*, 4 seers. Take also the following, *viz.*, the husk of pomegranates, *Aplotaxis auriculata*, *Elettaria cardamomum*, cardamoms of the larger variety, *Rhus succedanea*, the bark of the roots of *Mimosa sirissa*, *Aconitum ferox*, *Acorus Calamus*, 'Kodáliá' 'Kuruliá', *Erythrina Indica*, red sandal wood, *Tabernaemontana coronaria*, and 'Murámangsi.' The measure of these together should be one-fourth of a seer. All these should be cooked in ghee without any water being added. When prepared, this medicine, taken in proper dose, is capable of neutralising all kinds of poison. The name of this medicine is 'Cikhari-ghrita.' Another remedy consists of these: take ghee, 4 seers; and milk, 16 seers; take also, for making a paste, the following, *viz.*, Chebulic myrobalans, 'Gorochaná' *Aplotaxis auriculata*, the leaves of *Calatropis gigantea*, the bulbous roots of *Nymphæa stellata*, the roots of *Calamus rotang*, *Aconitum ferox*, the leaves of *Ocimum sanctum*, the seeds of *Holarrhena antidysenterica*, *Rubia cordifolia* *Asclepias pseudo-sarsa*, *Asparagus racemosus*, the fruit of *Trapa bispinosa*, *Mimosa pudica*, and the filaments of the lotus. The measure together should be 1 seer. Cooking these together duly, strain the liquid and mix with it honey of the measure of 4 seers. This ghee is called 'Mrityupáçachchedi.' It is

capable of neutralising all kinds of poison. The following also is an excellent antidote to all kinds of person. The bark of *Mimosa sirissa*, of the measure of 6 seers, and a quarter, should be boiled in water of the measure of 128 seers till 32 seers remain in the vessel. To this should be added treacle of the measure of 25 seers. Into the mixture should be thrown the pulv, measuring 8 tolas of each of these, *viz.*, *Piper longum*, *Aglaia Roxburghiana*, *Aptotaxis auriculata*, cardamoms, the roots of the indigo plant, *Mesua ferrea*, turmeric, and dry ginger. The compound should be kept for a month in a covered vessel. The action of all kinds of poison may be checked by this medicine administered in proper dose. The name of this medicine is 'Cīrīshārishta.' When the faults (*viz.*, wind, bile, and phlegm), as also the 'dhātus' or bodily ingredients, *viz.*, juice, blood, &c., of a poisoned person, move and act smoothly, when he feels relish for food, when his stools and urine are passed naturally, when his complexion becomes normal, when his senses and mind become cheerful, and when his movements and acts become natural, he should be regarded to have become free from poison.

After the poison has been neutralised, the patient should, for some days be kept upon careful regimen. While the person is undergoing treatment for poison, food that is very light should be given to him. He should never be allowed to sleep. For preventing sleep, it is better to give the person tea and coffee. After the action of the poison has been neutralised, old rice boiled, curries cooked in ghee, milk, and other nutritive food should be given. The person may bathe in current water, according to his bearing capacity. Mustard oil, fish, *Dolichos biflorus*, and food consisting of

Diet and forbidden practices.

inharmonious ingredients, should never be given. The person should also abstain from indulging in wrath and fear and sexual congress. He should abstain from labour. These are very beneficial.

If a person is pierced in a dark place by anything, he imagines that he is bitten by a snake or some other reptile or some insect, &c. He becomes filled with fear. This fear causes fever, cold, swoons, burning of body, pains, stupefaction, and diarrhoea. In such cases, the patient should be comforted with sweet and assuring words. He should be given diverse kinds of good food such as have been described above. Raisins, the bulb called Kshirakákoli, and liquorice, reduced to pulv and mixed with sugar and honey, should also be given. The leaves also of *Amaranthus spinosus*, of *Cælogyne ovalis*, *Solanum melongina*, of *Marsiba quadrifolia*, of *Salvinia cucullata*, and of *Trichosanthes dioica*, prove beneficial in such cases of imaginary poisoning.

TREATMENT OF PERSONS SUFFOCATED BY DROWNING AND HANGING.

No time should be lost in raising a person that has been drowned. If, upon raising him, his body be found to have warmth, and some elasticity, that is, if the rigidity of death has not set in, he should be regarded as a subject of treatment. If, however, there is absence of warmth and elasticity, the period of treatment should be regarded as over. The first step in the treatment should be to hold the upper part of the body in a downward posture so that the water which the person may have swallowed, as also the salivary and other secretions in the mouth, may all be let out. The mouth may be cleaned by inserting a finger wrapped round with a piece of cloth. For inducing respiration, the person should be made to lie on his side and some powerful snuff should be applied to the nose. 'Nisádal' (*Ammonium Chloride*,) Mixed with lime dust, may be used. If respiration cannot be induced by these means, the interior of the throat should be gently tickled with the finger, or with the feather of a bird, or some other soft substance. This may bring about sneezing or an urging to vomit. If these means do not succeed, the other methods that should be adopted are as follows : the patient should be laid horizontally with his face downwards. The chest should be made to rest on a pillow. He should then be turned on one of his sides. Somebody should then begin to press his two sides. The pressure should be applied and taken off repeatedly. Or, the patient may be made to lie down, with face upwards, and his back resting on a pillow. While somebody draws the tongue out, another, sitting towards the

patient's head, should raise the patient's arms and place them on the patient's breast. This should be done repeatedly. Without, again, drawing the tongue out, some one may be employed to blow into the patient's mouth while the physician, sitting towards the head, repeatedly raises and lowers the patient's arms as before. If by these steps respiration is induced, the arms and legs of the patient should then be repeatedly rubbed from the extremities upwards. The palms and the soles should also be fomented by using small bags of heated sand.

When by those means the person is restored to his senses, he should be given a little wine called 'Mritasanjibani' or a little brandy diluted with water. Measures should also be taken to induce sleep. During treatment, the patient should not be suffered to be surrounded by many people. Indeed, arrangements should be made for the patient's body being exposed to the air. When the patient gains a little strength, warm milk in small measures should be given to him. For at least eight or ten days he should be kept on light and healthy diet.

When a person seeks to kill himself by hanging, the rope by which his body is suspended should be promptly cut and the body gently let down. The methods laid down for reviving a drowned man should be adopted for restoring respiration. Lukewarm ghee should be gently rubbed on the neck and the throat. The person should be continually fanned near the mouth and the breast. If resuscitation can be effected, the patient should have a little wine. The directions regarding regimen are the same as in the case of a drowned man.

Treatment of persons who
seek to kill themselves by
hanging.

HEAT-APOPLEXY.

If a person, after having exposed himself for a long time to the heat of the sun or of fire, or after having staid for a long while in the midst of a crowd, or after having walked a long distance or undergone some tiresome labour, suddenly plunges into cold water, or drinks a glass of cold water, or does any cooling act, the consequences are, at first, excessive thirst and repeated urgings to urinate. A little while after, the body becomes hot; the eyes become blood-red; the pupils become contracted; and the heart palpitates violently. The pulse at first becomes quick, and then irregular and weak. The breath becomes quick and sonant. At last the person loses consciousness. This disease is called heat-apoplexy. It quickly destroys life. Hence, as soon as it appears, treatment should be begun.

As soon as the disease manifests itself, the patient should be made to lie down on his back in a shady and airy place. No crowd should be allowed to assemble round him. Cold water should be applied to the head, the face, and the chest. If respiration be stopped, it should be brought back by trying the means recommended in the case of a drowned man. The patient should be purged by administering either croton oil or some other powerful purgative. Emetics are baneful. If the patient cannot be soon restored to his senses, plasters should be applied on the neck, made of mustard seeds of the white variety, dry ginger, chillies, and pepper, all reduced to powder. When by these means consciousness

is revived and the breath restored, the patient should take cool sherbets and milk. If weakened, a little brandy, diluted with water, should be given, and the patient made to sleep. When thoroughly restored, light food should be given. For four or five days, the patient should live carefully. It should be observed that if a person becomes senseless in consequence of a fall from a tree or any high place, or in consequence of fear or of lightning, the treatment recommended for heat-apoplexy should be followed.

SUNSTROKE.

Exposure for a long while to the heat of the sun brings about thirst, dryness of the skin, giddiness, redness of the eyes, swoons, irregularity of the pulse, difficulty of breathing, tossing of arms and legs, nausea and vomiting, urgings to urinate, and other discomforts of the kind. Some get fever. If the patient tosses his arms and legs with violence, if his palms and soles become blue in colour, if his pulse becomes so weak as to be imperceptible at times, then it becomes difficult to save his life.

As soon as the symptoms of this disease manifest themselves, the clothes of the patient should be taken off, and he should be made to lie down in a shady and breezy place. Crowds should not be allowed to collect round him. He should be continually fanned with a palm leaf. Cold water should now and then be sprinkled upon the palm leaf. Small particles of water, falling upon the patient's body,

are capable of doing him much good. The patient should be given cold water, mixed with sandal paste, to drink in small measures. He should not drink a considerable quantity at once. The patient's body should be wrapped round with a piece of wet cloth. Before using the cloth it should be first dipt in water and then the water should be pressed out of it. When relieved, he should have a shower bath. If the patient loses consciousness, take a piece of flannel or blanket ; dip it in hot water, and press the water out. Sprinkle on it a few drops of turpentine, and wrap the patient's throat and neck with it. Over the flannel or blanket thus used, wrap a piece of plantain leaf, and over the leaf, a piece of dry cloth. When the swoon is over, the patient begins to feel intolerable pain owing to the bandage around his neck and throat. That bandage should then be taken off. If in consequence of the disease the body becomes cool and the pulse weak and irregular, 'Sweda' should be applied and the wine called 'Mritasanjibani' administered. A little of it, diluted with water, should be given. One of the most efficacious medicines in this disease consists of these : take sugar, 16 tolas ; white sandal-paste, 1 tola ; the juice of *Citrus acida*, 8 tolas ; the expressed juice of *Asparagus racemosus*, 8 tolas ; and the oil of fennel seeds, half a tola. These should be mixed with 2 seers of water, and the water should be stirred with a stick or ladel. This water should be given to the patient to drink in little measures. The infusion of the three myrobalans, and the several remedies laid down in the chapter on swoons, prove beneficial in this disease also. As long as the person is not restored to his normal condition, he should live very carefully. He should take wholesome, nourishing, and cooling diet and drink.

RELIGIOUS EXCITEMENT.

When people give way to excessive religious emotion, the wind in their constitution, becoming excited, brings on a swoon or fit of unconsciousness. Such swoons are not rare among the Vaishnavas of Bengal when they are engaged in chaunting aloud the praises of Vishnu in singing parties. The nature of these fits of unconsciousness is not correctly understood by the friends of those who are subject to them, for these are regarded as a state of communion with the deity. The truth is, a swoon brought about by religious excitement is a disease which, if not treated, injures the constitution and at last brings about death. During the period the swoon lasts, the eyes remain open, the pupils become fixed, the action of the senses becomes suspended. The heart continues to beat, and that is the only symptom by which it can be known that the person is not dead. In some cases, the person, instead of losing consciousness, shows other symptoms, such as excessive fluency of speech, boastfulness, fierceness of emotion, tossing of arms and legs, laughing, dancing, crying, and many of the signs of inebriation.

When swoons occur, consciousness should be restored by adopting the means recommended in the chapter on Epilepsy and Swoons brought on by other causes. By rubbing the patient's body with ghee that has been washed a hundred times, as also by administering the medicines laid down for swoons of other kinds, for diseases of the wind, and for insanity, benefit may be derived. Another efficacious remedy consists of these . white sandal wood, *Asclepias pseudosarsa*, *Echites frutescens*, *Hypoxis orchoides*, liquorice, 'Vit' salt, chebulic

myrobalans, the fruit of *Phyllanthus Emblica*, the fruit of *Terminalia Bellerica*, turmeric, *Berberis Asiatica*, the root-stock of *Nymphaea stellata*, *Mesua ferrea*, *Nardostachys jatamansi*, the seeds of *Ruellia longifolia*, *Pavonia odorata*, the roots of *Andropogon muricatum*, red ochre, *Sida cordifolia*, and *Sida alba*, taken in equal measures and reduced to pulv. Half a tola of this, taken with vaccine milk hot from the udders, taken for some days, cures this disease. For restoring consciousness, the following medicine may be used: take gold, pearls, mercury, sulphur, 'silājatu', iron, bamboo manna, and camphor, in equal measures. These should be subjected to the process called 'Bhābanā' in the decoction of the three myrobalans. After this, they should be pounded and divided into pills, each of the weight of one rati. By rubbing a pill on a stone, with water, the thickened water should be administered as snuff. By taking these pills internally, with the juice of *Asparagus racemosus*, the disease may be conquered. The dose should be one pill every day.

Old 'çāli' rice, boiled, such pulses as *Phaseolus Mungo* and *Cicer arietinum*, chuppatis made of the flour of barley or wheat, sesame seeds, milk hot from the udders, ghee, butter, sherbet of sugarcandy, ripe fruits of *Carica papaya*, sugarcanes, &c., should be taken. The person should bathe in current water; he should rub his body every day with mustard or sesame oil. Good living and good surroundings are more beneficial in the treatment of this disease than everything else. The patient should always try to remain cheerful. He should converse with agreeable friends and lovely women. An opposite regimen and course of conduct are productive of baneful effects. The patient should, therefore, avoid them.

Diet and forbidden practices.

CHOREA OR ST. VITUS'S DANCE.

Excessive fright, or wrath, or joy, destruction of hope, all acts that weaken or attenuate the system, disturbed sleep, loss of strength, wounds, worms in the intestines, constipation of

Causes.

the bowels, and irregularity of the menses in the case of women, excite the wind and produce the disease called Chorea or St. Vitus's Dance. It is sometimes called Insanity of the muscles. At first it is generally the left arm, then the right arm, then the two legs, then the whole body, begins or begin to exhibit various kinds of ludicrous and jerking movements. One suffering from this disease fails to seize anything properly with his hands. He cannot raise food to his mouth. He is always restless. Repeated contortions appear of the muscles of the face as if the patient is indulging in grimaces. When he walks, he moves on with a jerking motion, as if he is dancing. The symptoms disappear during sleep.

As this disease seldom appears unless there is a general deterioration of health, purgatives should be administered for removing constipation of the bowels. Medicines which improve the digestive fire and promote strength, should be prescribed. If the disease be induced by intestinal worms, such medicines should be given as are destructive of worms. If it be brought about by the total suppression or irregularity of the menses, the physician should endeavour to remove the cause by applying proper medicines. The decoction of *Echites frutescens*, *Asclepias pseudosarsa*, liquorice, the roots *Convolvulus Turpethum*, white sandal wood, red sandal wood (*Pterocarpus Santalinus*), *Elettaria Cardamomum*, cardamoms of the larger variety, and the fruit of *Phyllanthus Emblica*, if drunk by the patient, produces beneficial results. Besides this, 'Vrihat-cchágáládyá-ghrita' and other medicines mentioned in the chapter on diseases of the nervous system, and such oils as 'Kuvjaprasáriní', 'Mahámásha', &c., may be prescribed with great advantage.

Food that is oily, nutritive, and capable of promoting strength, is very beneficial in this disease. The regimen prescribed for diseases of the nervous system is prescribable in chorea also. The avoidance of all kinds of labour, lying on a bed for long hours, and bathing in current water, are especially beneficial in this disease.

Diet and forbidden practices.

